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INDUSTRY



VOLUME 7
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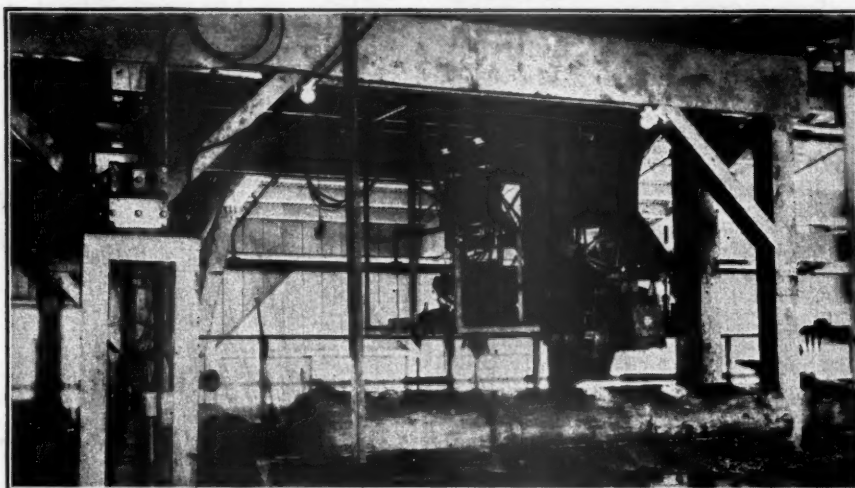
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Pacific

PULP and PAPER

Industry

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MILLER FREEMAN, President
L. K. SMITH, Manager
JOHN EASTON BROWN, Editor
HARLAN SCOTT, Advertising Manager
KEMPER FREEMAN,
Circulation Manager

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TAX SITUATION DEMANDS NEW APPRAISAL and ACTION BY INDUSTRY

THE TAX SITUATION is rapidly reaching a point where, unless remedial measures are taken, the burden on industry and individual will be unbearable. Prudence demands that industry give the whole subject careful study in the interests of self preservation.

The need for corrective action is aptly illustrated by a statement recently issued by the Washington State Tax Commission, which reveals that delinquent property taxes on December 31, 1932, totaled \$45,155,000, or 44.4 per cent of the aggregate due on that date. Delinquencies have increased from \$17,888,000 in 1929 to \$45,155,000 at the close of 1932.

The delinquency total has been gradually mounting for the past few years, and the percentage collection of current taxes has steadily declined. Collections of 1928 taxes in 1929 amounted to 90.1 per cent of the total levied; collections of taxes levied currently in 1931 for collection in 1932 amounted to only 70.3 per cent of the total. In 1933 they doubtless will be still lower.

The Tax Commission statement presents a general but vivid picture of what is happening all through the western states. Governmental income from property taxes is declining, creating deficits which are being balanced chiefly by new and higher taxes. The majority of new levies fall on business and industry, and unless a halt is called, industry will soon be saddled with a crushing tax load.

In many western states we have been treated to the spectacle of legislative bodies appropriating money for various and sundry purposes far in excess of tax possibilities, and afterwards casting about for new forms of taxation with which to balance expenditure. The common business practice of budgeting income and keeping expenditures within that limit has been almost entirely forgotten by governmental agencies. Were business to operate on present government principles we would have bankruptcies in wholesale quantities. Business has the right to demand that government subject itself to the same limitations which govern the activities of individual or corporation.

As the tax burden becomes increasingly onerous, defaults in payments increase, government deficits grow larger, and this load is gradually transferred to those who pay their taxes. The result is a growing revolt of taxpayers, many of whom refrain from paying, in protest of the tendency. It produces a situation which is becoming intolerable.

A revolt of the taxpayers is not the solution. The only remedy is the acceptance by government of the conditions which the economic situation imposes on business, the reduction of expenditures to within a legitimate tax income, the elimination of frills in government.

No one begrudges children their right to an adequate education, no one denies the need for a proper system

of roads, no one wishes to deprive our veterans of just compensation. But certainly there is a limit to governmental expenditure, beyond which it is unnecessary and uneconomical to go. The excessive cost of government is not due to its natural and necessary functions, but to activities which can be called luxuries at best.

The cost of the school system, that holy thou-shalt-not-touch of government, has increased 40 times from 1880, while the number of school children has little more than doubled. The per capita cost has risen from \$5 to over \$100. But are the graduates 20 times better educated and better citizens today?

By concentrating on essentials of education, our schools can still turn out well educated citizens, but at greatly reduced costs. Yet any suggestion of reduction brings forth a great outcry from the forces of education, public servants who cost more than the Army and Navy, and who wield great political power.

Our network of roads has been expanded tremendously, although many of them are not essential to the general welfare. The highway funds have become political capital in many cases, and to support the increasing expenditures, gasoline taxes have risen as high as seven cents per gallon, sometimes amounting to 50 per cent of its selling price.

Each year veterans receive millions of taxpayers' money because they served a few months in the Army and long afterward became ill or disabled. In many cases such drains on public funds cannot be justified on a common sense basis.

A few weeks ago the city employees of Los Angeles circulated petitions demanding that no reduction in property assessments be made and actually obtained 240,000 signatures. In effect, they demanded that further economy in government should not be practiced. In nearly succeeding in their selfish purpose, they exemplified a dangerous current trend.

It is time that industry paused to take stock of the situation and carefully investigate the question of government expenditure. When the national income was large the cost of government amounted to 12 per cent of the total. Now that the income of the people has decreased by more than half from 1929, governmental costs amount to 40 per cent. This intolerable condition must be corrected. While it is recognized that there are at present great demands on government for necessary relief, public works, etc., if waste is eliminated we still can have good government at materially reduced costs.

This waste will not be stopped except by demand of the taxpayers. In self defense, then, industry must make a new appraisal of the situation, search out the wasteful practices and make a united demand for correction.

NEW ROUND LOG BARKER GOES INTO ACTION AT CATHLAMET

EVER SINCE LOGS have been barked for commercial use, engineers have studied the problem of rossing the round log by mechanical means, have endeavored to devise machines which would do the job satisfactorily on a commercial production scale. Most of these efforts have in the past met with very indifferent success, and the problem had almost been relegated to the unsolvable.

Nevertheless, it now appears that through the ingenuity of a Pacific Coast engineering and manufacturing concern, and the experienced cooperation of a company whose product depends upon wood barked cheaply and efficiently, the problem seems to be in a fair way of being solved as far as small logs are concerned.

This machine is the new round log barker, designed by T. B. Sumner, president, and E. I. Flateboe, chief engineer, of the Sumner Iron Works of Everett, and installed last month in the wood mill of the Crown Willamette Paper Co. at Cathlamet, Wash. Besides effecting a material saving of wood, the round log barker permits the use of a specially designed Sumner chipper for reducing logs to chips, thus affording further reduction in chip costs.

First let us take a look at what the barker has done even in the comparatively short period of its operation.

The Crown Willamette Paper Co. operates large mills at Camas, Wash., and West Linn, Ore., which are supplied with cordwood and chips from the wood mill at Cathlamet, near their logging operations in company timber. Heretofore the logs have been brought

into the mill, cut into blocks, split and barked on disk hand-barkers. The cordwood has then been loaded on scows and barged to the respective mills for chipping.

In this work 21 men are employed, turning out 165 to 175 units of chips per day.

On March 13 the new Sumner round log barker went into operation. It was entirely an experimental machine, with no previous opportunity of proving itself, aside from a limited trial in the Sumner shops. Naturally there were many adjustments to be made, improvements to be found, kinks to be ironed out. From the nature of the problem it is obvious that a considerable period of operation should be necessary before the machine could do its best work.

Design Demonstrated Sound

Yet within four weeks of the first day's run, here is what the new barker was doing.

Its average production was from 150 to 200 12-foot logs per day, or about 75 units of chips, half the requirements of the West Linn mill. On the peak day, three weeks after operations were started, 236 logs were barked, or approximately 80 units of chips. Those in charge of the operation are confident of reaching a steady production of around 280 logs per day in the near future, working one 9-hour shift per day.

The operators consider the machine's showing to date eminently satisfactory in view of operating conditions, and believe its performance demonstrates the fundamental soundness of the principle involved.

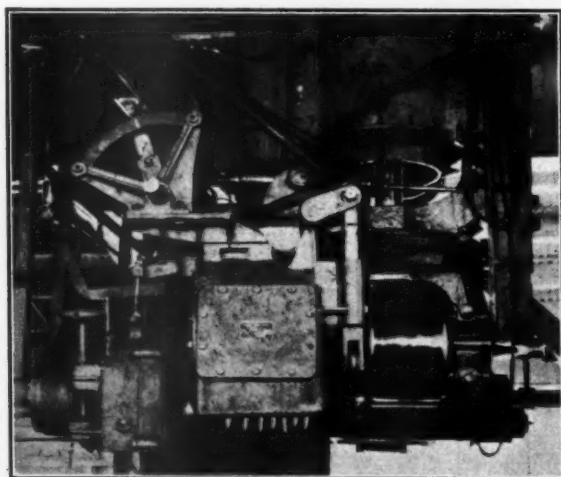
On the floor below the barker, the company has installed a new Sumner chipper. It has more than enough capacity for the barker, and with but one knife is at present operating only about 50 per cent of the time. The 12-foot logs go through it in 45 seconds; the addition of a second knife would take them through in 18 seconds. Inasmuch as four knives may be installed, the chipper represents a very large potential chip capacity.

As the logs come from the barker they are stored on the conveyor to the chipper so that they are sent through four at one time. Best chipping results are of course obtained when the logs are kept butted, as otherwise the small end pieces are not heavy enough to prevent a rebound which is detrimental to chip quality.

The quality of the chips obtained has been very good, with low sliver content and good chip uniformity, in spite of the fact that the chipper is not operating continuously. This is attributed to the better chipping effect obtained in chipping round logs in 12-foot lengths rather than the shorter cordwood pieces.

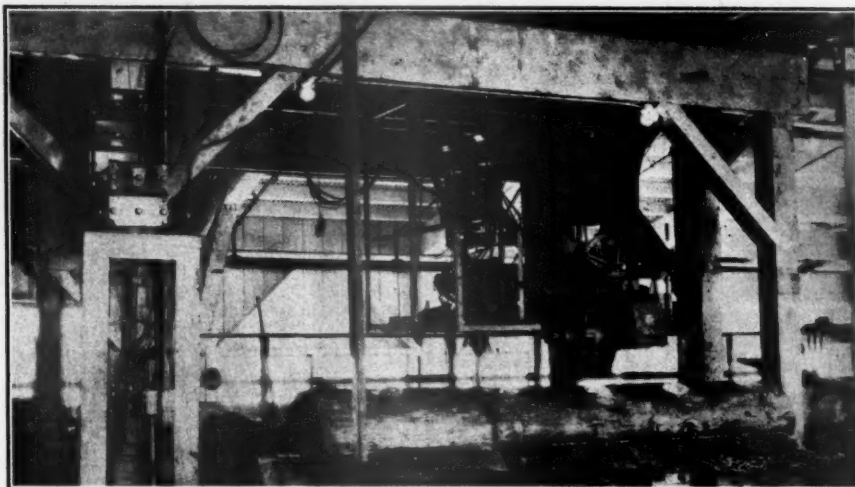
Mechanical Details of Barker

Now as to the machine itself. The principle of operation may be described as knocking the bark off by means of a hammer head. On this rotating head is



Close-up showing details of the hammer head and brush units. The hammers may be seen hanging below the head housing to the left of the belt and pulley which drives the head. Above the belt is the vertical worm gear which raises and lowers the entire cradle. The roller guides which gauge the barking operation are at each side of the head. The brush unit is at the left.

General view of the barker installation. Between the uprights at the left may be seen the operator's station and control buttons. Just to the right are the wheels of one end of the log bed. The barker itself is in the raised position at a point about two-thirds across its travel range.



hung a series of steel bars or hammers which hang loosely on pins through the head. As the head rotates these hammers swing out, striking a glancing blow on the bark with sufficient force and pressure to remove it. The log itself is rotated in the direction opposite to that of the hammer head, being held in the trough between two wheels at each end of the log. One of these wheels or rollers is smooth faced, the other is serrated in order to take firm hold of the log in turning it.

The carriage carrying the barking head is hung on overhead rails on which it travels over the length of the log, and back to its starting position. Thus, as the log rotates and the barker travels from one end to the other, the hammering action of the head is applied all around the log from end to end in a close spiral.

Immediately beside the hammer head is a separately driven steel wire brush which removes any bark, slivers, etc., remaining. A water spray here gives a further cleaning. The operators are trying various types of brushes at present in order to get the best effect. Brushes are available in a variety of types, offering every possibility from a light brushing effect to a reduction of the wood to excelsior.

The hammer head and brush are located at one end of a cradle resting on a rack and pinion fulcrum at the center of the machine. Compensating weight at the other end of the cradle is provided by the 30 h.p. General Electric motor driving the head and additional adjustable counterbalance weight. By changing the position of the adjustable counterweight, the weight or pressure of the hammer head on the log may be varied.

Further, by a combination of adjusting the rack and pinion at each side of the cradle and turning the cradle on a swivel, the horizontal angle of the head and brush in relation to the log may be increased or decreased, and the head properly positioned on the log.

Logs naturally vary in diameter at one end or the other or in the middle, and to remove all the bark the head and brush must raise or lower to conform with these changes. In addition to the effect of the oscillating cradle, this is manually controlled through two power-operated roller guides riding the log just ahead and just behind the cutter head. One of these guides is for properly starting the barking operation at the end of the log, and the other is for properly gauging the balance of the barking.

The entire cradle assembly is raised or lowered by means of a vertical worm gear driven by a 8 h.p. G-E motor. In this way the operator may raise the machine away from the log while it is traveling back to its starting point, during which time the next log is being conveyed to the turning bed below.

This is controlled, as are other functions of the machine, by a series of electric control buttons located at the operator's station. Originally the machine was designed so that the operator would ride the machine on a control platform attached, but in making the Cathlamet installation it was found more satisfactory to place the operator away from the machine, where he has a better view of the log. As shown in the general view of the installation, the operator's station is at the left, below the resistors, which were removed from the machine.

Sequence of Operations

The logs come up the log haul and are cut into 12-foot lengths by a new Sumner 96-inch circular saw with steam feed and direct connected motor. From this conveyor they are transferred to another at right angles, where they are held on chains which deliver them to the log turning bed below the barker. Logs up to 26 inches in diameter may be barked.

To receive the log, the log bed is lowered and the log rolls into it from the conveying chains. The bed then raises into position for barking and the log starts rotating. The barker itself is above the end of the log, the left end in the general view illustrated. By means of the vertical worm gear, which carries the weight of the cradle assembly on a large Timken thrust bearing, the cradle carrying the hammer head and brush is lowered to an operating position. As it begins its travel over the log, the operator adjusts the machine so that the proper pressure is obtained, from time to time making any such further adjustment as may be required by the conformation of the log.

If by chance any spots are missed or improperly barked, the machine may be reversed and returned as far as necessary in order to go over a section again. Ordinarily this is not found necessary.

When the log is completely barked, it is kicked over to the conveyor leading to the chipper, where the chipper man gives it any needed final touches with broom

or axe. It then goes on through the chipper, from which the chips are conveyed direct to a scow in the water beside the mill.

The bark drops down through the open spaces below the log bed and transfer chains and is either taken to the power plant or to a scow for barging to Camas where it is used for fuel.

Both hemlock and white fir are being used for chips at the present time. The Camas mill takes straight barges of hemlock or white fir, but West Linn can use mixed chips. No spruce is going through at present, but likely will later. The International Wood Products Co. is building a cheese box factory adjoining the plant, and when they are in operation in five or six weeks, will be using spruce blocks for slicing. The Crown Willamette company will provide the blocks, and will also furnish power, steam, etc. Wood unsuitable for box manufacture will be returned to the wood mill for conversion into chips. The box company is also going to experiment with white fir and hemlock as a box material. This tie-up will undoubtedly be profitable to both and will result in very close utilization of the entire wood value in the logs.

The Cathlamet operation is under supervision of Don Denman of the Crown-Willamette Paper Co., with



The Cathlamet wood mill of the Crown Willamette Paper Co. Chips are being delivered from the chipper to the barge alongside. The new part of the structure, 22 by 60 feet, at the right of the log haul, was built to accommodate the new round log barker.

Ralph V. Schafer in charge of the plant itself. E. P. Stamm assists Mr. Denman in his supervision and is also in charge of logging at the camp.

Mr. Denman, while conservative in his statements concerning the new barker, is pleased with the progress made to date, and recently said, "Although the barker has been in operation for only a short time, present results show considerable promise for the future. We probably will be making changes here and there in the machine for the next year which will improve its operation. We are not satisfied with its work so far, but feel that when final adjustments have been made the barker will be a very effective and economical piece of equipment."

Ultimately the barker will probably be placed on a float in the water, which will offer numerous advantages. The present installation was made inside in order to make it possible to easily make any adjustments and corrections.

OLYMPIC FOREST PRODUCTS REOPENS

After being idle since early in January, the pulp mill of the Olympic Forest Products Co. at Port Angeles has reopened for an indefinite run starting April 17. About 275 employees were recalled for the resumption of operations.

The wood mill commenced work April 15, working two 8-hour shifts. The pulp mill is running three 8-hour shifts. The length of run is not announced but steady operation through the summer is hoped for.

With the opening of the plant came the announcement of a change in the pulp finishing plans of the mill, in line with which a new 60 by 120 feet finishing room has been constructed. The pulp formerly was cut into flat stock as it came from the machines. Under the new system it will come from the machine in rolls so as to build a reserve stock for the finishing room. Thus the finishing room will be able to operate through periods of machine shut-down.

NEW SEATTLE PAPER BOX PLANT

Construction has been started on a new one-story factory and warehouse building on East Marginal Way, Seattle, for the Western Containers, Inc. The building will be L-shaped, 245 feet long, 150 feet wide at the rear and 75 feet wide in front. Total floor area will be about 27,000 square feet.

The land and building represents an investment of about \$40,000, while new equipment will total about the same figure. The firm was organized early in 1928 and has been operating a small plant since that time at 5053 East Marginal Way. The new structure will increase production about 50 per cent.

Western Containers, Inc., manufactures corrugated fibre board, and corrugated containers used in shipping food products, drugs, etc. V. J. Walsh is managing director and Earl B. Stark is secretary and sales manager of the company.

EVERITT JOINS VANCOUVER MILL

Carl B. Everitt, formerly with the Anacortes mill of the Puget Sound Pulp & Timber Co., is now superintendent of the Columbia River Paper Mills plant at Vancouver, Wash. He succeeds M. F. Herb, who passed away a few months ago.

ARGENTINA IMPORTS OF PAPER

—and paper products during 1932 practically equalled those of 1931, according to preliminary statistics published by the Argentina Government. Receipts during 1932 totaled 179,157 metric tons compared with 179,764 metric tons in the preceding year, a decrease of less than 1 per cent. The valuation or "aforo" placed on these imports, however, showed a decrease of 30 per cent.

URUGUAY IMPORTS OF NEWSPRINT

—paper during 1932 totaled 5,081 metric tons, valued at 304,862 pesos. (Uruguayan peso at par worth \$1.03; now worth \$0.47½). During the past year the Bank of the Republic has made repeated efforts to induce the newspapers to decrease the size and number of pages of their publications and hence decrease the amount of exchange necessary for the purchase of newsprint, all of which must come from abroad. The newspapers have vigorously opposed this idea, and so far have done nothing toward complying with the bank's proposal.

Pacific Section of TAPPI Meets at Longview, May 5-6

THERE'S ONE MEETING of the pulp and paper industry on the Coast this spring that you can't afford to miss, and that's the TAPPI convention scheduled for May 5 and 6 at Longview, Wash.

Whether you are an executive officer, superintendent, chemist, be your title and work what it may, if you're interested in new developments and new ideas of the industry, the Hotel Monticello at Longview is the place for you on that particular Friday and Saturday.

The committee handling the meeting for the Pacific Section of TAPPI, Ralph Hansen, H. R. Heuer and A. S. Quinn, are arranging a program that will hold the interest of every man there, plus a number of entertainment features that alone will be worth the trip. All mill men are invited to attend, whether they are members of TAPPI or not. The sessions will be open to all, and everyone will be welcome. Don't stay away just because you don't happen to be a TAPPI member.

The General Program

Just to give you an idea of some of the things on the program for discussion, run your eye over the list of subjects below.

1. Cellulose Viscosity and Its Use in Mill Control.
2. Two-Stage Continuous Batch Beating.
3. Moisture Measurements.
4. Reforestation.
5. Lubrication.
6. Instrumentation.
7. Pumping Problems.
8. Absorption Phenomena.
9. Determination of pH.

These are just a few of the topics before the spring meeting, giving a general idea of the extensive scope of subjects to be presented. In addition, there will be talks by R. B. Wolf of the Weyerhaeuser Timber Co. pulp division, by Raymond Hatch of the research department of the same company, a past national president of TAPPI, a paper prepared by Fred Weleber, chief chemist of the Hawley Pulp & Paper Co., a report by Ben Larrabee, the Coast's member on the national committee of TAPPI, and a number of other features of equal interest and value.

On Saturday the convention will be joined by that of the American Chemical Society, a feature which represents an added attraction of importance to all technical mill men.

Entertainment Features

Registration will open at 8:30 Friday morning, with the first session being called to order shortly after. A group luncheon will be held in the hotel, and in the evening all will gather again for dinner. Saturday, too, there will be a luncheon, and on Saturday night the hotel will be the scene of a gay dinner dance. Music will be provided during the luncheons, and at

the dinners there is promised entertainment that will quicken the most lagging spirits.

In addition to the papers which will be presented, ample time will be provided for the Question Box, and for the Open Forum discussions. Everyone is urged to come loaded down with questions and ideas on which profitable discussions may be had.

Saturday afternoon is to be devoted to golf and to mill visits. The selection of Longview as the site of the meeting was fortunate in that there are three mills immediately available for visiting. Visits will be arranged to the Weyerhaeuser mill, the Longview Fibre Co., and the Pacific Straw Paper & Board Co.

And now a word to the ladies. Mrs. Ben Larrabee is in charge of entertainment for the ladies and there will be plenty of it. Those wives who missed previous meetings have heard accounts from others who attended, and it is expected that there will be a good big crowd of ladies on hand to join in the fun of the convention.

Those who enjoy bridge will have ample opportunity to indulge in this parlor sport. Then there will be auto trips and sight-seeing. For those who have never been to Longview or out the road toward the beaches, a scenic treat is in store. Last, but not least, will be the theatre party being arranged specially for the TAPPI ladies. The local theatre is bringing a special film to be shown, and it is guaranteed to be especially good.

Cost to Be Reduced

The committee realizes that costs of the convention must be reduced this year, and is taking steps accordingly. Arrangements are being made with the hotel so that the extra room charge for wives will be very moderate. The cost of registration, which includes all meals except breakfast, and the dinner dance, will be held to a point lower than that of previous meetings.

The TAPPI meeting provides a common ground for men in all sections of the industry to meet and work out together their common problems. Out of it can come much good, but full results can only be obtained by the personal attendance of mill men from every plant. So you personally are urged to be there by the committee. This is to be a serious meeting, a business meeting, one from which you can take home new ideas of practical use to you. There will be play too, and plenty of it, but it will be subordinate to the practical business phases.

So plan now to attend. Come early and stay late, and do your part to make this TAPPI gathering a real success.

PACIFIC COAST SUPPLY OFFICE MOVED

The Seattle office of the Pacific Coast Supply Co. has been moved from the Smith Tower to 1018 Northern Life Tower, which is located at Third and University Sts.

INDUSTRY DICTATORS SUGGESTED

A dictator is needed in the major raw materials industries in the opinion of George P. Torrence, president of the Link-Belt Co. He recently expressed the opinion that President Roosevelt should name a dictator for each of the major farm crops—wheat, corn, oats, cotton—who would have authority to regulate production. Mr. Torrence stated that other industries such as coal, lumber, pulp and paper, etc., should likewise be managed by dictators with unlimited power to make binding rules and regulations covering limitation of output, cooperative sales agencies, specifications, prices and terms of sale, labor rates, consolidations, and anything that is required to make the industry orderly, efficient and profitable.

"What would be good for coal, lumber, oil and steel would be good for other industries," says Mr. Torrence. "Raw material industries are just as much in need of firm handling as agriculture and should be exempted from the anti-trust acts.

"The facts must be faced. There is no such thing as an unlimited market, at least not now. Capacity in excess of probable demands is a loss and should be so considered. It is unsocial as well as unprofitable to operate a business at a loss. Volume at ruinous prices is suicide; new products, opening new markets at profitable prices, is the only wise way to utilize excess capacity. It is possible to operate at half capacity or less and still make a profit. Industry and business are social enterprises to be operated for the mutual benefit of the owners, the workers and the public.

"The establishment of industry dictators is a partial revival of the powers of the War Industries Board, in the Federal Trade Commission and the Federal Farm Board; this time to limit production and raise prices. The emergency is just as great as in 1917 and just as definitely calls for prompt direct action, with the president in executive control."

JAPANESE MILLS TRY RAYON PULP

The Oji and Fuji Paper Companies of Japan have turned their attention to the manufacturing of pulp for rayon. These companies have been encouraged by the action of the Karafuto Industrial Company. The remarkable development of the rayon industry in Japan has caused the demand for pulp to increase rapidly. The consumption a few years ago was only 32,273,000 lbs., but this had increased to 64,218,000 lbs. in 1931. Seeing this active consumption, the Karafuto concern, which had hitherto been chiefly supplying pulp for paper manufacturers, decided to start making pulp for rayon.

OREGON COMPANY EXTENDS BONDS

The Oregon Pulp & Paper Company has been successful in its refinancing operations. The company last fall sought the extension of its bond issue, totaling \$900,000, for a three-year period in which only interest is payable. A sufficient percentage of bondholders has signed the extension agreement to make it operative May 1, 1933, when the next principal would have been due.

Principal payments are now set ahead three years. Interest has been increased on the bonds from 6 to 6½ per cent annually. The company covenants to pay no preferred or common dividends on its stock until the amortization schedule on its bonds is resumed on the original bond issue basis.

INDUSTRIAL RECOVERY ESSENTIAL TO AGRICULTURAL IMPROVEMENT

The popular belief that the farmers must be relieved and their buying power restored before industrial business can revive, is a misconception of the true situation, it was recently pointed out by Ossian Anderson, president of the Puget Sound Pulp and Timber Co.

"While it is true that the farmers' economic situation must be solved," he said, "their problems are so closely interlocked with those of industry that no real solution can be found until the condition of industry is also improved. The farm market is important to industry, yet the industrial market is as much or more so to agriculture. Few people realize that 60 per cent of our farm products are sold to industry. Until American industry can regain its own markets, through adequate national protection, this 60 per cent market for farm goods cannot improve."

Commenting on the political myth of the dire condition of agriculture, generally supposed to be much worse than that of industrial business, Mr. Anderson said, "Only 42 per cent of all our farms are mortgaged. The others are free and clear. Of the mortgaged farms only 18 per cent are in default. Unfortunately, the same enviable showing cannot be said of manufacturing enterprises.

"Farmers, industry and labor must join hands in common to preserve for themselves as much as possible of our relatively large domestic market, now being invaded and inoculated by cheap foreign goods. This invasion is made possible through production in these foreign countries by their clever and unprecedented method of managing the values of their currencies, based on gold, which they are manipulating in relation to the pound Sterling at the head of this group, for selfish benefit, and our nation, with no right to criticize, has failed to perceive this smart trading policy. This trading policy has effectively served to destroy values and employment in gold standard countries. We must either protect the metallic value of our currency by passing laws to take away this advantage now enjoyed by our foreign friends, or join the mad race of managed currencies, which I personally feel can only lead to destruction for all."

SWEDISH MILLS OPERATING AT PROFIT

It is interesting to note that while pulp and paper mills in the United States are operating at slow speed and usually at a loss, important Swedish firms are declaring substantial dividends.

The Holmens Bruks & Fabriks A. B., large newsprint manufacturers, reports a net profit of 1,730,000 kronor for 1932 against 2,470,000 kronor for 1931. They propose to reduce the dividend from 7 to 5 per cent.

The Billerud Company, a leading producer of pulp and paper, reported a net profit of 2,400,000 kronor and has reduced the dividend from 6 to 3 per cent.

BELLINGHAM MILLS REELECTS OFFICERS

All directors of the Pacific Coast Paper Mills were reelected at the annual meeting of the stockholders and later the board chose the same officers for 1933.

The directors are: J. J. Herb, P. J. Herb, George H. Bacon and William McCush, all of Bellingham; E. M. Herb and H. M. Lord, New Westminster, B. C., and John D. Watson, Appleton, Wis.

J. J. Herb is president; P. J. Herb, vice-president; William McCush, treasurer, and Victor A. Hughes, secretary.

THE 30-HOUR WEEK

If the 30-hour week now being contemplated by the Federal administration becomes compulsory by law, what will be its effect upon the pulp and paper industry? Do leaders in the industry feel favorably or unfavorably inclined toward the proposal?

The consensus of opinion seems to be fairly favorable, although the difficulties in complying with such regulations are fully realized. The general feeling is well summed up by the statement of one executive who said, "I feel favorable to the plan as far as its principle is concerned. It would, however, work a hardship on us in that it would cost us a lot of money to train new crews to work the extra shift that would be necessary."

It has also been pointed out that many of the jobs in Coast mills are already being rotated on a similar basis, keeping as many men at work as possible. Where the character of the job permits, many men are working but six hours a day.

The Lebanon, Ore., mills of the Crown Willamette Paper Co. went on a six-hour day, four shift basis, early in April, having previously operated on eight-hour shifts three or four days a week.

FREIGHT REDUCTIONS HELPING PULP MILLS

The recent intercoastal rate reduction to \$4.10 is enabling Pacific Coast pulp mills to offer closer competition to European producers, although the trans-Atlantic rate is still lower than the intercoastal charges. The reduction of the rail rate to points west of Chicago from 55c to 45c, and to points east of Chicago from 60c to 50c, has had the same effect.

The effect of these rates was recently summarized for this journal by Ossian Anderson, president of the Puget Sound Pulp & Timber Co., who said:

"The \$4.10 intercoastal rate on wood pulp is temporary and subject to revision in 90 days. With the surcharge of 15c, this \$4.25 rate to the Atlantic seaboard compares with \$3.75 to \$4.00 freight rates, on a long ton basis, enjoyed by our foreign competitors from Europe. In other words, we are paying our rate on 2,000 lbs. and their lower rates are based on 2,240 lbs. The cooperation shown by the intercoastal carriers who granted these rates is much appreciated by the Pacific Coast producers who, after all, realize that these American lines are compelled to employ American seamen and pay a living wage based upon gold, whereas foreign ships take our freight dollars, convert into debased kroner, pounds or finmarks and thereby are able to undercut the gold dollar freight rates at any time. The reduced rate has put us in better position to compete than before and we hope that if conditions do not improve in the pulp markets these rates may be extended for further periods.

"The recent cut in rail rates has lowered the total freight to some of the Middle Western points in Ohio and Michigan to \$10.00 per ton gross weight. This is a reduction of \$2.00 from the former rates and again helps us to better compete with the movement of pulp coming on lower rail rates from Canada into this same territory. During the summer months the movement of pulps coming over all water routes from some Canadian mills, is at some rates as low as \$3.00 per ton, and all the way from Europe via the St. Lawrence at \$7.00 to Milwaukee, Duluth and Green Bay. These water routes we cannot follow owing to shipping laws prohibiting the trans-shipment of American cargoes to foreign bottoms at Montreal for reentry into the United States."

A UNITED BUSINESS PROGRAM

Under the heading "A United Business Program", an editorial in the Saturday Evening Post of March 25 points out that one of the really grave defects in our American system is the failure of industry as a whole to make itself heard. While individual corporations and industrial groups attend their own interests, industry in its entirety has lacked in common objectives and united constructive action.

With all its organization, business fails to present a solid front, particularly on great legislative questions, the editorial says. There are plenty of organizations and associations to exert great power, but there are in fact too many of them and too many different purposes.

As a result, industry lacks any clear voice in national affairs, the article concludes. What is needed is a united program, an aggressive stand on vital issues by business.

The pulp industry demands protection from depreciated money competition. So do the fisheries, the lumber manufacturers and many others. Many industries have the same legislative needs, but express them in too many different ways, at too many various times, through too many organizations. The result is confusion.

Leaders of industry cannot expect to get action by leaving the handling of their national problems to localized organizations. Only by the specific attention of executives themselves to their legislative needs, and by active personal work in consolidating public opinion and uniting all business groups in a unified program, can the voice of industry be heard. Results can be attained only if industrial leaders give personal interest to their legislative problems, and themselves direct their industry's activities.

NEW WOOD MILL AT PORT TOWNSEND

The National Paper Products Co. have started construction of a new wood mill adjoining their Port Townsend pulp mill. They formerly purchased all chips, but under the new plan will split logs on a 9-foot band saw, bark the slabs and send them through the chipper. The mill will be all electric. Power will be brought from the company's plant on the Elwha River.

Logs will come from the new logging operation near Neah Bay and will be rafted down the straits to Port Townsend.

Construction is in charge of E. W. Erickson, resident manager.

AN ARTICLE WORTH READING

There appeared in the Saturday Evening Post of April 15 a lead article by Garet Garrett dealing with the question of depreciated currencies and their effect on our domestic market. It presents a clear picture of the situation, and should be read by every man in the industry.

In dealing with this question, the Saturday Evening Post gives recognition to the nationwide interest in it, an outgrowth of the work of the Foreign Exchange Committee of the Business and Industrial Conference, of which Miller Freeman, publisher of Pacific Pulp & Paper Industry, was chairman. Considerable of the information used by Mr. Garrett in his article, was furnished him by Mr. Freeman.

MAKING RAYON

from Wood Pulp

By RALPH B. HANSEN

Technical Director,
Pulp Division Weyerhaeuser Timber Co., Longview, Wash.

THERE IS A VAST amount of romance and achievement behind the history of the development of rayon—the first synthetic textile. Rayon was first produced in the middle of the 18th century. Between that time and 1870 its history is one of heartaches and disappointments. Perhaps no investigator during the early study of rayon did more or finer work than Louis Schaub of England, who, at the conclusion of his work (around 1850), was unable to interest the English government or English capital to the extent of building a commercial plant, so he became discouraged and took his own life. It remained for Count Chardonnet of France in 1878 to culminate the efforts of his predecessors.

Many new inventions are happenstance, but not so with the successful development of rayon. Chardonnet was a purposeful student of research and it was while a student of Pasteur, a master biochemist who was studying the life, habits and diseases of the silk worm, that Chardonnet deliberately conceived and artificially reproduced the secretion with which the silk worm made the silk thread.

For thousands of years it had been known that the silk worm fed on the leaves of the mulberry trees. It was but natural then that Chardonnet confined his studies and research to the mulberry leaf. Through an application of his chemical knowledge, he determined that this leaf was largely cellulose and concluded that a solution of this cellulose in some solvent would duplicate the secretion of the silk worm. It would be necessary then to force this solution through some small opening which would form a thread which, when it came in contact with some substance, would precipitate it as cellulose.

All Vegetable Life is Cellulose

At this early date, chemistry and science were not developed to the high degree of today and it was not known that the resistant structure of all vegetable life is cellulose and that it matters but a point of economy whether we obtain this cellulose from one source or another. There is little difference between the cellulose of a cabbage leaf and the fibre taken from the heart of one of our great Western Hemlock trees. However, from a standpoint of mass production, yield and economy of processing, it matters greatly from which source this fibre comes.

The long time required for the successful mass production of a high grade of artificial silk was brought about by the inability to obtain a purified cellulose from which to make the rayon thread.

Wood Pulp Cheapest Cellulose Source

Had Chardonnet known what we today know, he would have substituted cotton for the mulberry leaf as a source of cellulose. Cotton is nature's purest form, being about 90 per cent pure cellulose. However, as a source of raw material for the manufacture of rayon

in a large scale production it is out of the question due to cost compared with cellulose obtained from wood pulp.

Such was the early life of rayon. Chardonnet produced the first artificial fibre in 1884. Five years later the French Academy of Sciences granted him protection and he was able to interest capital to the extent of building in his home town of Besancon, France, the world's first artificial silk mill. This original factory continued to successfully operate until 1914, when it was taken over by the French government for the manufacture of war materials. After the war this factory was sold to the DuPont interests, who remodeled it and continue to manufacture rayon there today. Chardonnet is known as the father of the rayon industry.

It is but natural that in the past fifty years, or since Chardonnet came out with his process, new processes and changes should take place. For this reason the Chardonnet process is not widely used today but has been displaced by a similar process known as the Viscose process. Approximately 90 per cent of all the rayon in the world is made by the Viscose process which I shall now outline in detail, more or less.

The Viscose Process

The sheets of pulp are steeped or mercerized in a solution of caustic soda of about 18 per cent strength. The time usually required for this steeping operation is 2 to 4 hours. The sheets are stood on edge in a small vat just slightly larger than the sheets of pulp. The ends of the vat form the face plates of a hydraulic press. At the end of the steeping operation the ends of the vats move up together and the sheets are pressed until their weight is approximately four times the weight at which they entered the vats. This operation dissolves out practically all of the hemicellulose and leaves a product having a new chemical composition and called sodium cellulose.

After the excess caustic is pressed from the sheets, they are placed in shredders where they are reduced to very finely divided white particles commonly called crumbs. The time required for the shredding operation is from two to three hours and the object of this process is to produce a more uniform or well blended product.

These alkali cellulose crumbs are now placed in large cylindrical cans. The cans are closed and stored at a closely controlled temperature for about 48 to 72 hours. This is known as an aging process, such changes occurring are not as yet fully understood.

Chemical Changes Effectuated

After the aging process is completed, the alkali cellulose crumbs are placed in large rotating drums where they come in contact with carbon disulphide to form a gelatinous mass known as cellulose xanthate. The reaction of carbon disulphide with the alkali cellulose produces a sodium salt of cellulose xanthogenic acid,

The chemical utilisation of wood is gradually eliminating the waste from the forest industries. Previously wasted wood is more and more being made into wood pulp from which is derived a number of highly useful products; gun-cotton, artificial leather, artificial lumber, moving picture films, cellophane, artificial rubber, unshatterable glass, paint, artificial sausage casings, rayon, etc. One of the most interesting is rayon, the manufacture of which is described in this article.

or sodium cellulose xanthate which is usually called cellulose xanthate.

The product of the xanthating operation is dumped through a vertical chute into a dilute solution of caustic soda and water where it is agitated until a proper homogeneous mixture of viscose is obtained. The mixing takes from 4 to 5 hours with the solution held at a temperature below 60 degrees C.

Upon completion of the mixing operation, several of the mixer batches are run into a large mixer for the purpose of blending them into one uniform batch for the spinning operation.

After the mixing and blending operation, both of which take place at very closely regulated temperature conditions, the solution is filtered by being forced through layers of closely woven cloth. This filtration is an exceedingly important step in the process. It is absolutely necessary that this filtration remove all solid matter from the viscose solution in order to prevent clogging the minute holes in the spinnerette. The solution is usually filtered three times if it is to be used for the manufacture of rayon.

After filtering, but before the solution is ready for spinning, all air bubbles must be removed. Unless removed these air bubbles will cause breakage of the filament at the spinnerette. To accomplish this, the solution is run into tanks and vacuum is applied for at least 24 hours. Following the removal of the bubbles the solution is ready for spinning.

The Spinnerette

It would probably be interesting at this point to describe the spinnerette, or the machine which forms the silk thread. If you have examined any silk thread, however small, you will find that it is made up of considerable number of still smaller threads. The number of threads which are usually wound together to form a single thread, as you know it, is usually 18 to 24, sometimes running as high as 75. This number of threads is formed at the same time by the spinnerette which I shall now describe.

This little instrument is about the size of a very small thimble, which a seamstress might use, and looks somewhat the same. They are made of platinum or platinum iridium. The closed end of the thimble has 18 to 24, or more, holes in it. These holes are 0.002 of an inch in diameter usually. The variation in size of one hole as compared to another is less than one ten thousandth of an inch.

These thimbles or spinnerettes might be imagined as being screwed over the end of a pipe, similar to a pipe cap, the viscose solution being forced through the pipe and out through the small openings in the spinnerette. The spinnerette is immersed in an acid bath. As these tiny threads emerge from these holes in the spinnerette and come in contact with this acid, pure cellulose is regenerated. The small threads immediately solidify when touching this acid and the number of threads are led from the bath into a mechanism which is spinning at a very high rate of speed. This gives the thread the twist that you will observe if you will examine a thread of artificial silk or rayon.

After the thread leaves the spinnerette and the regeneration bath it is wound on perforated bobbins. Wa-

ter, under pressure, is forced into the coil of these bobbins, passing out through the perforations, and washes the rayon thread. After washing, the thread is dried and skeined. After skeining, the thread is still polluted with a small amount of free sulphur which is then removed in a de-sulphonating process, after which the skein is washed and then bleached with a mild solution of calcium hypochlorite. After bleaching, it is again washed, dried and skeined and is then ready for the textile industry.

World Rayon Production

Now just a word on the production and trade economics of this growing and important industry. During the past 15 years the world production of rayon has increased over ten times. While the current depression has no doubt influenced the growth of the rayon industry, yet there was produced in 1932 approximately 200,000 tons or almost as much as in 1928. This is over three times the production of raw silk. Approximately 30 per cent of this world's production (twice as much as any other nation) is produced in the United States. Great Britain, Italy, Germany and France are the other large producers. During the last five months of 1932 the rayon mills in the United States were running over capacity and were in the pleasant position of refusing orders.

Due to the demoralization of the raw silk industry brought about by the trouble between Japan and China, and due to depreciated Oriental moneys, it was necessary for the American rayon producers to drop the prices of their finished product below that necessary for profit, and hence their full time operation means little or nothing.

Western Woods Most Suitable

Before concluding, let us say just a word on the adaptability of western wood in this industry. Western hemlock and spruce make a very fine source of cellulose for the rayon industry. These woods, by comparison, are very clean and are relatively free from pitch, iron, ash and other objectionable ingredients. Not only is the West Coast fortunate in having a very high grade of wood, but it also has the world's finest mills for the conversion of these woods into a high grade sulphite pulp. At Shelton, Wash., just below Olympia, is located the Rainier Pulp & Paper Co. This company, under normal conditions, makes about 175 tons per day of high grade wood pulp, all of which goes into the production of rayon, cellophane and related products.

PUGET SOUND PULP OFFICERS REELECTED

All officers of the Puget Sound Pulp & Timber Co. were reelected at the meeting of stockholders held late in March, according to announcement from Ossian Anderson, president of the company.

SEATTLE HAWLEY OFFICES MOVED

The Hawley Pulp & Paper Co., Oregon City, Ore., has removed its Seattle offices to larger quarters in suite 509 in the Medical Arts Building at Second and Seneca. Their Seattle representative is Fred G Statham.

NEW TAX and FOREST POLICIES DECLARED ESSENTIAL at Forestry Meeting

MEETING AT SEATTLE March 22-23, the Western Forestry and Conservation Association discussed the problems and responsibilities of forest ownership, particularly in connection with the heavy burdens being carried, which are responsible for the chaotic economic situation of forest land and forest industries.

Of primary concern to the pulp and paper industry were the discussions on taxation, protection of tax-forfeited lands and forest policies to govern the management of western timberlands.

In opening the sessions, President G. B. McLeod pointed out that the three major burdens of timber ownership are taxation, interest and fire risk. He referred to the efforts to solve these questions by legislation, so far unsuccessful, stating that the opposition failed "to face the outstanding fact that the ad valorem tax on timber is breaking down; that while a given amount might be spread on the rolls, the taxes are not being paid, and whether the owners of other property like it or not, as long as a high rate of expenditure is being maintained, the deficiency will unquestionably have to be made good by such other property." All admit that the present system of taxation is intolerable, he said, but none had any solution to offer.

Forest Taxation Affects Pulp Industry

Thus the question of forest taxation is of vital interest to the pulp mill operator, for he is not only dependent on the forest for his raw material and is affected by every change in the timber situation, but he is also liable to heavier taxes on his plant if timber taxes remain at a level which forces owners to forfeit their timber and cut-over land to the county or state.

E. T. Allen, forester of the association, developed this subject further, pointing out the need of the adoption of a uniform forest policy. He said: "The fact is that our national system of spreading forest ownership and management so indiscriminately and uncorrelated among thousands of agencies and individuals . . . was and is untenable. It admits of no forest policy. It endured a few decades, but began to collapse of its own weakness. It collapsed totally when unsupported by the prosperity of a pioneer phase in national development. The result is crisis, not only to forest industry but also to the commonwealth, especially where populations have built their economic fabrics largely on a foundation of forest industry and taxation."

Efforts to make a start in the right direction by uniform legislation for a yield tax, were unsuccessful this year, representatives from the various states reported. Bills were prepared in Washington, Oregon and Idaho, but were not enacted into law. The general consensus of opinion was favorable toward the yield tax principle, although all agreed that such transition must be gradual in order to be fair to short-time operators as well as long-time holders.

Yield Tax Favored by Owners

It was felt that the past efforts have been useful in creating interest in the subject and bringing a closer realization of the forest problem to the general public.

It was recommended that the idea be sold to the taxpayer so that tax reform would be demanded by them for the protection of the state, rather than for the benefit of whoever happened to own timber tracts at the time. Officers of the association agreed to appoint a committee of three timber owners from each state to discuss the merits of the various bills drawn and to prepare uniform legislation for submission to the next legislatures.

California is going slowly in this movement of substituting a yield tax for the general property tax, as they feel it might result in both being levied. Some believe it might be subject to considerable increase, as has the gasoline tax. California operators want a reduction in the general property tax before asking for a yield tax, and are not interested unless it comes as a constitutional amendment.

In discussing probable readjustments of forest ownership and responsibilities, W. B. Greeley said that the whole question of western forest ownership requires fresh analysis and consideration. The problem of forest land tax delinquency, both of timbered areas and cut-over, is becoming yearly more acute and widespread. This economic factor, plus the pressure of large tracts of non-convertible, non-revenue-producing timber, will force extensive areas back into some form of public ownership, he believed, and this must be directed in orderly fashion so there will be no land without responsible ownership and protection.

He described several proposed plans for government ownership of timberland, which were treated at some length in a paper prepared by R. Y. Stuart, Chief of the U. S. Forest Service, together with plans suggested for operation on a sustained-yield basis.

Western Control of Western Forests Advocated

In an open forum, G. F. Jewett said that in Idaho the annual tax costs have increased to a point where it is cheaper to buy timber from the government than to own it. Other representatives confirmed this, stating that in most states there is a virtual landslide of cut-over land into the tax delinquent class. While turning the land over to the government to ease the tax burden was looked on favorably by some, Ted Goodyear, assistant forester of Washington, insisted that the states should make it possible for private owners to retain their property as long as possible, and that it be turned over to federal ownership only as a last resort. His belief was that western forest land should be administered as far as possible in the west instead of in Washington, D. C.

RAMSEY NOW EVERETT SUPERINTENDENT

James G. Ramsey is now superintendent of the Everett Pulp & Paper Co., taking the position recently vacated by George MacNaughton. Mr. Ramsey has had many years of experience in the paper business and formerly was with eastern book paper manufacturers. His family is expected to come to the Coast a little later.

Shall We

PROTECT AMERICAN INDUSTRIES

Or SCRAP OUR IDLE PLANTS?

In response to a query from this journal as to whether we need a scrap pile; a well informed man of thirty years' experience in the industry says Yes, and points out that unless some relief is afforded so that our idle plants may operate, we might as well scrap all the idle and bankrupt mills in the country.

That the paper industry and others as well need a scrap pile goes without saying, but how is this to be brought about when you cannot even get the manufacturers as a group to stop cutting prices and curtail production and work for the general good of all instead of the selfish interest of the individual company?

I think the pool idea is a good one and the only possibility of accomplishing any results. It would not require a very great investment to buy up all the idle and bankrupt mills in the country as the scrap value would offset the original cost to a considerable degree. As long as these mills are allowed to exist they are a constant menace to the industry because just as soon as business picks up a little some one will take them over at little cost and start them into production again, thereby increasing competition and acting to keep prices down to a point of no profit.

Destroy Old Mills and Start Over

Insofar as the paper industry is concerned and paper mill workers in general, it would be well if not only the old obsolete mills were actually destroyed, but many of the later mills also, and then let the business develop anew—which will mean better prices and better business for the paper industry and a chance for engineers, draftsmen, shopworkers and machine builders, and everything that goes with activities of this nature, to get to doing something again. If something of this kind does not take place I look for very slow times for this class of workers for years to come.

What has brought us to this pass is that we accomplished in ten years time what we normally would have accomplished in 20 or perhaps 30 years, and while I hope we will not have to wait another ten years before business gets back into its stride, things do not look promising for an early return of prosperity. As a matter of fact we do not want a boom again, but if we could be set back where we were 15 years ago and then start out on a normal rate of development, we would all be better off. This, of course, is impossible of achievement in its entirety but is possible to a considerable extent. The only way to get back there is to destroy our excess productive capacity. In my estimation, with certain reservations, the total actual value of all existing mills is no greater than the value of that

number of mills capable of producing our present requirements; hence the balance has no more than a scrap value irrespective of how it is carried on the books of the various companies, and if it were physically destroyed, it would mean no loss that has not already taken place.

In all probability not over 40% of the actual capacity of our plants is being utilized today; hence 60% is practically worthless and stands as a barrier to renewed activity in the construction and machinery industry.

Better Sold for Junk Than Taxes

These sound like radical statements and drastic remedies for a well nigh fatal illness, but please tell me what is going to be the outcome from an investment standpoint of the larger number of plants of various kinds that are idle today and have been for several years. These paper and pulp plants deteriorate almost as fast as in operation and furthermore they will be obsolete if this condition continues to exist another five years.

The idle pulp mills on the West Coast and elsewhere in this country come in a little different category because these plants have an excuse for their existence and perpetuation, but something drastic must be done and done very soon to save them, otherwise the bondholders and stockholders would be better off if they were torn down and sold for scrap in order to save taxes, insurance, upkeep and administration as each year a plant stands in that condition the value to the security holders will be less by that much plus depreciation and obsolescence loss, altho the latter go on whether the plant is idle or in operation. Eventually they will be sold for taxes and, if so, the security holders will get nothing.

It may be argued that as long as we have the capacity established we ought to keep it intact to provide for expansion when it is needed, but if this same policy was followed in surplus of foodstuffs, and it has to some extent, it would depress prices until such time as something occurred to reduce the surplus. You can stop planting in an emergency and the elements may intervene to use up or prevent a surplus, but when manufacturing plants are once built they will last a long time and excess capacity will hinder or prevent entirely the revival of such industries and professions as are commonly identified with the development of the particular industry.

Industrial Condition General

What is said here in regard to excess capacity in the paper industry applies equally well to most other lines, as there is no doubt but that many other lines are

experiencing the same difficulty that the paper industry is, and I think in some cases the condition is even more aggravated. The destruction of such plants would be no worse than the destruction of wheat, cotton or coffee or the burning of corn for fuel or the destruction of things in general during war. We say the result of war is an economic loss, but it was the result of the war that brought on the great boom in production and if we destroyed excess, idle or obsolete manufacturing property in peace time somewhat along similar lines, it would offer greater opportunity for general renewed activity when increased demand became evident.

However, I don't think any discussion in an article is going to bring about the desired result as the great difficulty encountered in a move of this kind is to get the individual manufacturer to agree that any part of his plant should be destroyed. He would be loud in his praise and would no doubt be willing to contribute to the execution of the plan if he could be assured that his plant would not be molested — so I think we will just have to muddle along and let nature take its course as the natural laws of economics will eventually accomplish, though in a longer period of time, just what we think ought to be done over night. The only flaw in that mode of procedure is that there will be much suffering, much discouragement and much weary waiting before benefits will begin to show.

Currency Legislation Would Solve Situation

This is all beside the question of depreciated currency which, however, I feel if rectified in some manner, would mean much greater activity in the manufacturing line in this country and perhaps the elimination in a more satisfactory way of some of our excess capacity. I believe if we manufactured a much larger percentage of the goods we consume it would help conditions materially in this country.

I believe it is said not over 10 per cent of our manufactured products should or need to be exported in order to insure happiness and prosperity in this country.

It is difficult to see why it should be necessary for this country to import goods that we can just as well or better manufacture here, and particularly when we have the raw materials and the capacity to do so, for the sake of having the privilege of exporting a small percentage of other goods.

This may be one of the rules of international trade that must not be thwarted but Great Britain in her undisguised scheme of promoting trade between the dominions and the mother country to the exclusion of foreign goods, does not seem to be worrying about whether she is going to lose trade with other countries by her efforts or not. I have often wondered whether our exports to the pulp producing countries that are flooding this country with pulp are consuming our goods in anything like the proportionate value. The relative benefits to this country in general should be considered in this matter of exchange of goods.

There is no doubt that goods manufactured from pulp can be produced cheaper in this country today by the use of foreign pulp, but this no doubt applies also in the case of the finished goods. If there was sufficient foreign capacity to provide us with our requirements (and it is more than likely that foreign countries will expand their own factories so that they can supply us with more and more of such products), in the long run we would be purchasing a much larger

percentage of our needed finished goods, to the disadvantage of our own manufacturing plants.

Only One Alternative

Under the circumstances our manufacturers have but one alternative in order to save themselves from destruction and that is to reduce cost of production and that in time will mean a reduction to the scale of wages and living in foreign countries and the elimination of untold millions of dollars in capital investment in our plants in order to reduce the fixed charges, which are now such a heavy burden. While I can see and appreciate the magnitude and complexity of the problem before us, I confess I am incapable of seeing or offering a way out.

There never was a time when courage and foresight and intelligent effort were needed more than they are at present, and yet it seems there never was a time when all of these elements working together were productive of such meager results leading toward the desired end.

Another sulphite mill in connection with a paper mill closed down in my state right after the first of the year, throwing out of employment about 60 men directly and perhaps as many more indirectly. And other mills are also threatening to close down, so that in a few years if conditions do not change for the better we will have few, if any, pulp mills left in this state.

I presume the foreign imports will increase in proportion to the capacity eliminated in this country and little by little we will be purchasing our finished paper as well as other goods from foreign countries until eventually we are reduced to a nation of "consumptives" only, and will then proceed to die a slow death, financially, physically, mentally and morally.

Lack of Protection Will Be Fatal

Insofar as pulp is concerned unless something is done to restrict foreign imports, and in the main that is the end to be desired and can only be done by a tariff sufficiently high or an equalization fee to combat the depreciated currency of the countries so that our mills can offer pulp at a competitive price, it not only means the ruination of the pulp business in this country but will effectually and completely stop the development of the industry in this country and will have a ruinous effect on machinery and equipment builders throughout the country who have large foundries and machine shops devoted almost entirely to this class of work.

It will affect a wide class of workers whose livelihood depends on the continuation and development of this business, and effect of its ramifications will be felt in almost all walks of life. Possibly we can make paper cheaper as things exist, but there will be less paper used and any reduced cost of manufacture will be reflected in a reduced purchasing power—so that in the end nothing will be gained by those whose minds are so clouded by selfish interests that they cannot see the broader aspects of the case.

Your editorial in the December number of Pacific Pulp & Paper Industry is to the point and should be taken to heart by the publishers until our most influential factors in this country can and will see the light and act accordingly. There is not much hope of the possibility of effecting results by the classes of minor influence; although the former can be reached by the combined efforts of the latter who are in reality the greatest sufferers.

SELF-CONTAINMENT AND THE U. S. PAPER INDUSTRY

In a recent issue of the magazine "Fortune" is published an article entitled "The U. S.: A Self-Contained Nation?" In general it is an unbiased discussion of the advantages and disadvantages, of the United States growing more and more self-sufficient unto herself, with lessening dependence on imports from foreign countries.

In spite of its impartial tone, the editors of "Fortune", when speaking of the pulp and paper industry, have permitted a common misconception to creep in, a sophistry propagated by our internationalists until it is becoming rather generally accepted.

The article states that there is no inherent reason why we could not produce within the country such paper as we require, but says that it would of course be produced at greater cost than by importing it from the northern forests of Canada and Scandinavia. It concludes that the price of newsprint would mount high and that there would be a serious difficulty in securing the necessary domestic production; that therefore the desirability of self-containment in the pulp and paper industry is dubious.

The pulp and paper mills of the United States have already proved their ability to manufacture their products at a price competitive to that of foreign countries, in normal times. The present inability to meet these prices profitably is not due to higher normal production costs in this country, but to the advantage foreign competitors have gained through the depreciation of their currencies. In order to meet these prices, American producers' production costs would have to be 35 per cent lower than those of foreign factories, in order to offset the currency trade advantage.

Given opportunity to compete in the open market, all competitors using the same monetary yardstick, American manufacturers could produce paper for our national requirements at no greater cost than in foreign countries. New areas of forests opened for production, new species made available for pulp through new processes, increased efficiencies in management, have enabled the industry to do this, despite the protestations of those opposing development of the American industry.

As far as difficulty in obtaining sufficient domestic production is concerned, the paper industry in this country has recently operated at around 50 per cent of capacity, hence could immediately practically double its output, were self-containment the order of the day. Moreover, our forests are not now being utilized nearly to the degree necessary for intelligent conservation of this resource. Immense stands of mature timber are in static condition, decaying, becoming valueless. A recent report of the Timber Conservation Board says, "The present forest problem in the United States is not one of timber shortage but of the proper protection and management of our forested areas. . . The area now covered with commercial forests and likely to remain available for that purpose, if given ample protection and management, is more than sufficient to meet any probably future demand. . . At present there is no indication of a future shortage of paper, in the problem of keeping the pulp industry at home."

The question of self-containment with respect to the

pulp and paper industry does not hinge on cost of production nor on availability of supply, but on whether or not the industry shall continue to be subjected to the domination of internationalists and foreign producers.

WELEBER CHIEF CHEMIST AT HAWLEY'S

Fred Weleber has been appointed chief chemist of the Oregon City mill of the Hawley Pulp & Paper Co. He has been with the mill for some time, and succeeds Ray Schadt, who is now with the Crown Willamette Paper Co. at Camas.

TURBINES INSTALLED AT SALEM

Four new General Electric turbines have been installed on the paper machines of the Oregon Pulp & Paper Co. at Salem, Ore. They range from 150 to 450 h.p., depending on the power required for each machine.

The plant formerly bought driving power, and used high pressure steam for drying. The new installation enables them to use the steam for driving power and the exhaust steam for drying, which should result in a considerable saving.

CASH JOINS ST. HELENS MILL

C. P. R. Cash is now connected with the pulp mill of the St. Helens Pulp & Paper Co. at St. Helens, Ore. Mr. Cash, formerly was pulp superintendent at the Cascade mill in Tacoma and later with the Union Bag Co. there.

NEWSPRINT FROM YOUNG FIRS

A proposal to cut 25 years off the idle time of Pacific Northwest forests by using fir trees as soon as they are 15 years old to make white newsprint paper was made recently by H. K. Benson, professor of chemical engineering of the University of Washington.

"There are two regions in the United States where trees grow rapidly," he said. "One is the humid South; the other the humid Northwest.

"In the South the experiments of the state of Georgia and of Dr. Charles H. Herty show that any pine, if young and freshly cut, can be used successfully in the manufacture of sulfite pulp, that is, of newsprint and various grades of fine white paper.

"Associates of Dr. Herty now in the Pacific Northwest have indicated that what is true of the pines of the South is also in all probability true of the Douglas fir in the Northwest. Should this be the case a great impetus would be given to reforestation in this region, since fir is the dominant forest species in the Pacific Northwest."

Douglas fir never has been used successfully in white paper making. Experiments were made with old fir and the wood did not "cook" evenly enough. Much the same was the experience with old pine trees in Georgia. There nobody would believe that the young "sapwood" pines could possibly be different than the old trees until Dr. Herty proved it. He slipped a basketful of this young pine into the cooker of a paper mill manufacturing the standard white paper from spruce. The young pine, about 15 years old, made the same kind of paper as the spruce.

Wire Manufacturers Support American Industry in Reply to International

FOLLOWING THE ACTION of the Wire Cloth Manufacturers' Association in writing newspapers all over the nation urging them to buy newsprint made in the United States, the International Paper Co. felt it necessary to make a reply. They did so in a pamphlet written by their sales manager, J. L. Fearing, under date of March 11.

The complete text of the statement follows:

"AMERICAN" NEWSPRINT

An organization called the Wire Cloth Manufacturers Association has mailed to us copy of a letter with other papers attached in which the newspapers of the United States are bitterly criticized for using Canadian newsprint ("We Indict the Press", reprinted from Pacific Pulp & Paper Industry—Editor). In their letter, a duplicate of which they state has been sent to every newspaper in the United States, they say:

"When hundreds of newspapers look to Canada and Europe as their source of supply (of newsprint) it is little short of a national calamity. A foreign purchase is a donation to that country at the expense of the United States. And, it is un-American."

They also say:

"We respectfully request that you let your readers know that your patriotic impulses are not governed by greed, and run across the top of one of your pages the following statement:"

"This publication is printed on paper made by labor in the United States of America."

Before attempting to discuss the newsprint situation, let us look at some figures:

	United States Newsprint Sold in U. S.	Canadian Newsprint Sold in U. S.
1910.....	1,130,000 tons	25,000 tons
1932.....	990,000 tons	1,640,000 tons

The Wire Cloth manufacturers were evidently ignorant of the facts and conditions existing in the newsprint industry when they said, in effect, that the publishers of the United States should not use Canadian newsprint but should confine their purchases to the United States mills. They could not have known that our northern neighbors now supply approximately two-thirds of all the newsprint paper consumed in the United States! Probably also they were unaware of the fact that Canada's newsprint industry has, to a very large degree, been financed with capital from the United States. And possibly these Wire Cloth gentlemen were equally in the dark as to the reasons why the production of newsprint in the United States is now less than in 1910, while its growth in Canada in recent years has been so phenomenal that today newsprint is the leading manufacturing industry of the Dominion?

Let us, therefore, review some of the facts so that proper conclusions may be reached.

In 1911, following a long and persistent campaign on the part of powerful interests in this country, Congress was aggressively urged to attach a "rider" to a Reciprocity Treaty with Canada which was then under consideration. The rider called for free entry of Canadian newsprint into the United States. It was adopted by Congress, as was the Reciprocity Treaty itself. Later on, in the same year (1911) Canada declined to accept the Reciprocity Treaty—but the newsprint rider was not contingent upon trade advantages from Canada and became operative.

It would serve no good purpose to review now the reasons advanced by those who then demanded from Congress free newsprint from Canada—nor would it be helpful to state why the manufacturers of the United States, including Inter-

national, strenuously opposed the move. For the purposes of this discussion it is enough to note that since 1911, by the act of our own Congress, newsprint from Canada has been admitted into the United States duty free.

Following free trade with Canada, many manufacturers owning newsprint mills in the United States naturally turned their eyes northward, where a widely extended forest domain, controlled by the government, was welcoming capital from the United States with open arms. International, however, was reluctant to move its newsprint operations to Canada. Along with many other United States manufacturers it did not relish the uprooting of established institutions. It knew that small towns in New England and New York had grown up around its paper mills—that churches and schools had been built and that many employees owned their homes. What would such people do if their chief source of livelihood should be eliminated? Obviously, difficult social problems would have to be solved.

But, as the years went by, it became more and more apparent to International that with Canadian newsprint entering the United States market duty free, it could not hope indefinitely to postpone moving its major newsprint operations to Canada. In 1922, its first Canadian newsprint unit was established at Three Rivers, Quebec. Meanwhile, other companies had built modern mills in Quebec and in Ontario and were becoming more and more aggressive competitors of International in the United States market. By 1924 it had become imperative that further expansion in Canada must be undertaken if International expected to maintain its position in the newsprint field. With this in mind, the company doubled the capacity of its plant at Three Rivers. During the period between 1925 and 1929 it also erected mills of the highest efficiency at Gatineau, Quebec, and Dalhousie, New Brunswick; and early in 1928 it acquired, by purchase, a thoroughly modern plant at Corner Brook, Newfoundland.

But International's program of necessary expansion across the border did not result in any curtailment of its activities in the United States. Quite the opposite. Here are some figures that show International's position in 1932 in the paper industry of the United States as compared with its position in 1910:

International Paper Co.'s Paper Production in United States

Year—	Newsprint	Other Grades	Total
1910	365,800 tons	62,438 tons	428,238 tons
1932	127,057 tons	527,008 tons	654,065 tons

In explanation of the increased production in the United States by International since 1910 in grades other than newsprint, it is only necessary to say that many of International's former newsprint mills in New York and New England have been converted to the manufacture of book, bond, tablet and other grades, and that it has built up a huge Kraft paper industry in the states of Florida, Alabama, Mississippi, Louisiana and Arkansas.

Let us now return to the issue raised by the Wire Cloth Manufacturers Association—that Canadian Newsprint should not be considered "American" so far as the United States market is concerned.

No major industry outside the borders of the United States is as truly American in character as the newsprint industry of Canada. It is safe to say that more than half of the total investment in Canada's paper industry is represented by United States capital.

While Canada sells a very large proportion of her newsprint in the United States, she has always bought in our country a considerable portion of her requirements of two of the three essential raw materials used in the manufacture of newsprint: coal and sulphur. In 1931, the latest year covered by official statistics, the Canadian industry imported from the United States 660,478 tons of coal, valued at \$3,667,935.00—and 129,402 tons of sulphur, valued at \$3,118,471.00. It also imported no small quantity of other materials and equipment for paper making and, if we take a really broad view of trade relationships, we find that Canada

is the second best customer of the United States. The value of United States exports of all kinds to Canada in 1929, 1930 and 1931 averaged 670 million dollars yearly. During those years, our purchases from Canada (including newsprint) averaged 400 million dollars yearly. To this could be added our tourist expenditures, which show a balance in Canada's favor which averages, for the three years mentioned, 192 million dollars yearly.

Having in mind the action of Congress in 1911, together with basic facts and figures that clearly show how closely woven is the newsprint industry of North America—knowing also that wage scales and living standards in Canada are substantially the same as in the United States, can anyone justly say that North American newsprint is not truly "American"? We hardly think so!

Today the North American newsprint industry, like all other industries, is suffering from a depression. The consumption of newsprint in the United States, which, for the first twenty-nine years of this century, increased annually about 6 per cent, has now dropped more than 30 per cent from the 1929 level. Accompanying this drop, prices have been repeatedly reduced, with the result that many important companies not only do not earn the interest on capital invested, but suffer operating losses which, if continued, must inevitably force them to shut down.

Sales and offerings of newsprint from European countries at unprecedentedly low prices, partly made possible through lower wage scales and different standards of living, but chiefly through the drastic depreciation of European currencies, have contributed further to harass the American newsprint industry and add to its unemployment problems.

The attitude of the newspapers of Canada and of the United States is consistently helpful to labor, to agriculture, to mining and to manufacturing. Publishers, of course, know that their own prosperity depends upon the ability of the public to buy the goods that are advertised. They know that if buying power languishes, advertising slumps.

They are well aware of the conditions now existing in the American newsprint paper industry—they know that a constructive attitude towards those who supply them with their white paper is desirable and necessary from every practical point of view.

In attacking the newspapers of the United States for purchasing Canadian newsprint on the ground that it is not "American", the gentlemen of the Wire Cloth Manufacturers' Association have taken a slap at the American newsprint paper industry as well.

If our publishers were forced to rely on the capacity output of all the reasonably modern U. S. newsprint mills, they could obtain less than half of their present requirements. If to this were added the capacity of the older and obsolete mills in the United States at prices high enough to justify running them (in 1926, the last year such mills ran to capacity, prices were 70 per cent above today's prices), our publishers could obtain only a little more than half of their supply, even at today's low consumption level.

Had the Wire Cloth gentlemen understood the real facts, they would undoubtedly have refrained from indulging in their ill-considered and untimely criticisms.

Upon publication of this pamphlet, the wire cloth manufacturers commented on it, in a statement released late in March, which follows:

AMERICAN NEWS PRINT

By A. M. Ferry
Wire Cloth Manufacturers' Association

We have read with much interest Mr. Fearing's Comment in the Paper Trade Journal of March 16th. The "organization called the Wire Cloth Manufacturers' Association" is grateful to Mr. Fearing for giving greater publicity to the issue because we believe any controversial question of this kind is best solved when even those remotely concerned with it are given the opportunity to consider it.

In the first place, let us admit quite freely that the letter sent to newspapers and paper mills by the Wire Cloth Manufacturers' Association was inspired by a certain degree of selfishness, but according to a very considerable number of the paper mills in the United States it was what is sometimes called intelligent selfishness. The future welfare of the wire cloth industry is necessarily predicated upon the welfare of the paper industry and the manufacture of newsprint is, of course, a factor in the paper industry at large.

That the paper industry in general does not resent this form of selfishness is sufficiently evidenced by the replies received to our original letter. It is interesting also to note that a considerable majority of the newspaper publishers who replied to our original communication heartily approved the motive even though some of them felt the indictment was unnecessarily severe. No small number of these newspapers adopted the slogan for their mastheads, indicating that their raw material was made in the United States by United States labor.

As to the facts of the case, we are well aware that it would be physically impossible for every newspaper in the United States to use paper manufactured by labor in the United States. This, however, is due to the fact that during the past two decades more newsprint and pulp mills ceased operations in the United States than were erected in Canada. We are equally aware that one of the principal reasons for the decrease in the supply of domestic newsprint is the tendency to buy a product that is made outside of our borders and that the continuing tendency will finally bring us to a situation where paper published in the United States will be entirely dependent on Canadian or other non-domestic newsprint.

It is a sound assumption that if a reasonable number of United States newspapers adopted the policy of buying United States newsprint, the domestic industry would find the facilities to supply a much larger proportion of the total.

Newspapers are a large factor in our national life and the United States should continue to have within its borders the facilities for producing the principal raw material of which newspapers are made. In an extremity any other policy would be a national calamity.

As noted above, many newspaper publishers in the United States see this point very clearly. A considerable number of them buy newsprint made in the United States at an annual increase of cost to the individual plant ranging from a few hundred dollars to a half million dollars, in order to insure a continuing domestic supply.

There has been a great hue and cry on the part of certain factors in our citizenry against over-emphasis on nationalism. They scoff at patriotism on the ground that patriotism produces war. In spite of this development in modern thought, many of us feel that these newspapers are to be commended for sacrificing present commercialism to long-sighted patriotism.

We have it on the best of authority that the Canadian newsprint industry is largely controlled by capital which originates in the United States. The United States today is suffering from the lack of employment for men and not for the lack of employment for capital. The man who is walking the streets in our own country will probably get very little satisfaction out of knowing that the competition which put him on the street is financed by American capital. To quote from Mr. Fearing's article, "Publishers, of course, know that their own prosperity depends upon the ability of the public to buy the goods that are advertised. They know that if buying power languishes, advertising slumps." It seems entirely proper to ask wherein the buying power of the man on the street is increased by the investment of United States capital in the Canadian newsprint industry.

On December 6, 1930, an advertisement was published in one of the trade papers, bearing the signature of Mr. Fearing. Part of the text was as follows:

"Efforts are being made in the United States and Canada to relieve existing unemployment. As a part of the program we suggest that purchases of newsprint might be limited to the product of North American mills, which, no matter where located, represent in many instances the investment of capital from the United States."

In his more recent article in the Paper Trade Journal for March 16th he refers to "Sales and offerings of newsprint from European countries at unprecedentedly low prices," which have contributed further to harass the American newsprint industry and add to its unemployment problems.

If we are to avoid nationalism, is it not as reasonable to build up the United States newsprint industry along with the Canadian newsprint as it is to favor the so-called "North American" industry against Norway and Sweden? In other words, is it not logical to build up employment in the United States by buying as much newsprint in the United States as the United States can furnish?

Furthermore, and we must blush when we suggest this, would it not be good patriotism, and perhaps far-seeing com-

mercialism, for the "North American mills" to buy their Fourdrinier wire from "North American" manufacturers instead of getting a considerable portion of it from Germany, Austria, Sweden, Czechoslovakia, France and other countries, which are not "North American" and which, presumably, have no "North American" money invested in their wire producing plants?

The wire cloth industry in the United States, while not of great size, still has a heavy percentage of unemployed and it would seem that Mr. Fearing's principle of buying "North American", as far as newsprint is concerned, might well apply to buying "North American" where Fourdrinier wires are concerned.

It is unfortunate indeed that the human race apparently has not reached the point where commercial enterprises can be run on an entirely unselfish basis. There are few institutions of any size which can be entirely consistent in their selling and purchasing policies. On the other hand, most of us can muster arguments for the course of action which seems to us necessary, and it is highly desirable that such arguments be brought into the open, not only for the benefit of our customers and those who serve us, but for the benefit of clear thinking on our own part.

In continuing their efforts in behalf of American newsprint, the Wire Cloth Manufacturers' Association is rendering a great service to the American pulp and paper industry. It is contributing, perhaps better than they now realize, to the creation of a growing sentiment in the nation in behalf of American industry.

INTERNATIONAL SEEKS RECEIVERSHIP FOR NEWSPAPER

The Senate Finance and Banking Committee, now investigating the giants of American finance might cast one eye toward the comparatively insignificant happening the other day right in the national capital, when the International Paper Company petitioned Supreme Court Judge Cox to appoint a receiver for the Washington Post, because of an unpaid paper bill.

If the Banking Committee of the Senate ever got started on this trail it would make the most classic example of how the "money changers" had worked up a combination of paper plants, power companies and allied enterprises in both the United States and Canada, that while it might not be the largest, in some ways appears to be the most sinister of any of the many industrial organizations that has been built up in the past few years by these wonder bankers.

Among the largest stockholders of the International the court records show the names of Ogden Mills, former Secretary of the Treasury, and Albert Wiggin, who has so recently retired as head of the Chase National Bank, who is listed as a director and member of the Executive Committee of International.

The International set out to buy up a lot of daily newspapers throughout various parts of the country about three years ago, their ground being they wanted to control their purchases of newsprint. They paid sky-high prices for the stock of these papers—but that was all right, because the International was getting the money through the ledgerdmain of Albert Wiggin and other financial wizards, who found they could keep on issuing securities to the people, who still had faith in the big bankers.

As the plot unfolds Ogden Mills is seen in control of the financial system of the United States government. No wonder, when a delegation of industrialists and fishermen waited on Mills at San Francisco last September he replied that it was a very difficult matter to attempt to protect home markets against competition with countries having depreciated currencies.

Secretary Mills' blunt and arrogant refusal to act was based on the ground that the correction of depreciated currencies was not a simple matter, but very complex and unless handled very carefully would develop international complications.

It now becomes clear to those who attended the San Francisco meeting just what the "International" complications were.

If such combinations were allowed to continue all opportunity for individual enterprise would be checked.

The pulp and paper industry of America could not thrive, nor ever reach its logical development but would be effectually

stified by these interests with their operations so largely foreign.

If the Senate Banking Committee will assemble the evidence about the Chase-Mills-Wiggins group it will make clear what they were trying to do not only in the pulp and paper industry, but in utilities and in buying into or furnishing credit to newspapers throughout the country.

It is hoped when the new legislation is put into effect supervising the operations of investment bankers, including the issuance of securities, it will put a stop to a condition that has been developing in this country, creating economic and political tyranny that has been a growing menace to all lines of legitimate enterprise.

"GOD SAVE AMERICA!"

"God Save America" is a slogan appropriate to the times.

A paper salesman called at the San Francisco office of Pacific Pulp & Paper Industry last week, not knowing wherein he stepped. He offered us machine finish book at 3.85c. We now pay 5.5c. His small order price was 4c—3.85c on 50 tons, 3.75c on 100 tons—and we probably could get a better price if we kept boring in on him.

Where does his paper come from? Norway and Sweden.

We asked him how this "Buy American" campaign was affecting his business and he said "not a bit". He said, with a smirking smile, "Even William Randolph Hearst, with all his 'Buy American' propaganda, buys his paper foreign". Wonder where he got that idea?

Then he proceeded to quote figures of the amount of canned fruit and other products Norway bought from us. A few well selected questions would have tangled him up, but he stuttered so badly there was little possibility of drawing him out.

But the most interesting and tragic part of the interview was his reply to a question—are the Norwegians willing to guarantee the price over a period of a year? Yes. Apparently they consider there is little likelihood of Congress passing depreciated currency legislation? Yes, they feel the chances much slimmer now than in the last session. He had already said that depreciated currency was the reason their price was lower than ours. If you figure it out, their price is exactly 35 per cent lower than our domestic price, the same rate as their currency depreciation.

If the Norwegians are willing to enter into a contract for a year on a price dependent solely on depreciated exchange, they certainly are sure the depreciated currency legislation will not go through. And we guess we will have to find out about these things from the foreigners.

A NEW PRODUCT

—similar to celluloid is being developed in Norway, according to a recent report from Trade Commissioner Gudrun Carlson, Oslo. Preliminary production tests have been started in Frederikstad. The new material (which is to be called "Trelit") is said to be the result of long experimentation. It is claimed to be stronger than celluloid and is manufactured from wood pulp. The chief purpose for which this new material will be tested out is toys, but it is anticipated that it will be adopted for many other products, including buoys for fishnets and life belts, which must withstand the effect of water for long periods.

T · R · A · D · E · T · A · L · K

of those who sell paper in the western states

+ + + +

PAPER TRADE ASSOCIATION TO MEET MAY 11-13 AT DEL MONTE

Paper trade folks and millmen from all along the coast, and a few from the east, will be heading for Del Monte soon to attend the sixteenth annual convention of the Pacific States Paper Trade Association to be held there May 11 to 13, inclusive, and to take part in the fifteenth annual golf tournament staged by Pacific Coast paper manufacturers at the same time.

Harold Zellerbach, San Francisco, president of the Pacific States association, will handle the gavel at the convention meetings. Mr. Zellerbach is president of the Zellerbach Paper Co. and a new vice president of the National Paper Trade Association, in line for the presidency next year. Arthur W. Towne, San Francisco of Blake, Moffitt & Towne, is executive vice-president of the coast body and likely will be elevated to the presidency at Del Monte for 1933-34.

Louis A. Colton, San Francisco, vice-president of the Zellerbach Paper Co., is chairman of the program committee of the convention and Augustus Johnson, San Francisco, Everett Pulp & Paper Co., as usual, is directing the golf. Assisting Mr. Johnson are M. M. Baruh, San Francisco, Crown-Zellerbach Corporation; Andrew Christ, Oakland, Western Waxed Paper Co.; Harry A. Goedje, San Francisco, Crown Willamette Paper Co. and M. C. Mitchell, Oakland, California Cotton Mills.

Always one of the important and interesting features of the Del Monte paper gatherings is the joint meeting of the merchants and manufacturers and this will be held Thursday May 11. The annual banquet and golf dinner will be on Saturday evening May 13.

Mr. Johnson advises the golf tournament will run two days, Friday and Saturday, May 12 and 13, with play on a handicap basis and a thirty-six hole medal event for gentlemen and an eighteen-hole medal play for ladies.

NEW ZELLERBACH FOLDERS

On May 1 the Zellerbach Paper Co., San Francisco, will bring out the first of a "Progress Series" of folders tying in advertisements of its papers with great western enterprises. The series is being prepared under the direction of R. C. Ayres, advertising manager, and the first number will feature Hoover Dam and Olympic Gloss-coated book made by the S. D. Warren Co. from pulp supplied by the Olympic Forest Products Co. mill at Port Angeles.

Mr. Ayres points out, in the folder, that the Warren research laboratories, have evolved a new method of applying adhesive in coating papers, giving the new stock greater strength and a stronger affinity for ink.

EASTERN LEADERS TOUR COAST

Norman Wilson, president of the Hammermill Paper Co., of Erie, Pa., and Harrison R. Baldwin, sales manager of the same company, were together in southern California recently and conferred with Harold R. Zellerbach, Louis A. Colton and Mason B. Olmsted of the Zellerbach Paper Co., and Fred Wuenchel, sales manager of the Grays Harbor Pulp & Paper Co. Mr. Wilson is a former president of the American Pulp and Paper Association and Mr. Baldwin is present head of the Writing Paper Manufacturers Association.

Following the Los Angeles visit Mr. Wilson returned to Arizona to be with his son and Mr. Baldwin made a trip up the coast, visiting the Grays Harbor mill at Hoquiam, Wash.

L. A. HOLDS REGIONAL CONFERENCE

A regional meeting of members and non-members of the Los Angeles Paper Trade Conference and mill representatives was held March 22 in Los Angeles and was attended by H. L. Zellerbach, president, and H. Arthur Dunn, secretary, of the Pacific States Paper Trade Association. More than 50 attended the meeting and as a result many new members are now on the books of the Los Angeles local. Similar meetings have been held in San Francisco lately.

BAG PRICES UP

Thomas A. Doane of the Doane Paper Co., San Francisco, says things look hopeful now that bags and wrapping papers are going up. Prices on bags have been ridiculously low, Mr. Doane says. In big lots bags have sold for as low as 3 per lb., while paper itself was 7c.

GENERAL PAPER ADDS SALESMEN

The General Paper Co., San Francisco, recently added two more salesmen, one in the fine paper and the other in the coarse paper division, and W. B. Maxwell, sales manager, says he is sure now things are on their way back.

PUZZLES INCREASE BOARD DEMAND

Charles Pritchard, sales manager of Bonestell & Co., San Francisco, paper jobbers, says the jig-saw puzzle boom has brought some increased business to board manufacturers. Most of the board used has been from 12 to 16 ply. While the bulk of the jig saw puzzles have been manufactured in the east, a growing number are now being turned out on the coast.

HAWLEY EXECUTIVES VISIT BAY CITY

John H. Smith, vice-president and general manager, and Arthur Hosfeldt, sales manager of the Hawley Pulp & Paper Co., were in San Francisco in March.

C. A. GORDON OF OXFORD ON COAST

Charles A. Gordon, vice president of the Oxford Paper Co., was out from New York with Mrs. Gordon on a business and pleasure trip in March and spent some time with the Blake, Moffitt & Towne organization, which has handled the Oxford line on the coast for years. Oxford manufactures book papers and has mills at Rumford, Me.

CARLTON SMITH MAY ATTEND CONVENTION

Ben Levison, San Francisco, mill agent for the American Envelope Co., West Carrollton, Ohio, reports that Carlton Smith, president of the company, may be on the coast next month to attend the Pacific States Paper Trade Association convention at Del Monte.

J. P. PARSONS VISITS COAST

John P. Parsons, assistant sales manager of the fine paper division of the International Paper Co., New York, was on the coast last month visiting his firm's agents and also spending some time with relatives in Santa Barbara. Mr. Parsons went through the Los Angeles earthquake and says he has had enough of that kind of goings on to last for the rest of his life. In San Francisco Mr. Parsons was with E. B. Skinner of the Martin Cantine Co. for a very happy two days.

3c POSTAGE HURTS ENVELOPE BUSINESS

"The worst thing that hit the envelope business was the raising of the first-class postal rates from 2c to 3c," says George R. Davis, San Francisco, manager of the Pacific Coast Envelope Co. Mailings dropped off right away and many big public service corporations immediately started sending men around on collections instead of mailing bills because they found it cheaper. Also, Mr. Davis notes, many mail order advertising campaign funds have been diverted to newspapers and trade papers.

W. J. GRAY RECOVERING FROM OPERATION

W. J. Gray, San Francisco, Paterson Parchment Paper Co., was operated on for appendicitis April 5 at the St. Francis Hospital in that city and was reported doing nicely. Jimmy has long been one of the regular attendants at the annual May conventions of the Pacific States Paper Trade Association at Del Monte and his friends are hoping he'll be able to hobble down to the coming meeting May 11-13.

STANDARDIZED SAMPLE BOOK ISSUED

R. C. Ayres, San Francisco, advertising manager of the Zellerbach Paper Co., reports that the firm is getting the cooperation of its various mills in issuing a standardized sample book, 6 by 9 inches. These books are put into double-thick covers by the Zellerbach company, with index tabs and unit numbers and fit the printer's sample case nicely.

THE SOUTHERN CALIFORNIA EARTHQUAKE

The paper business in Southern California was not seriously damaged by the recent earthquake, according to word received from Ward, Davis & Dunn, Inc., Long Beach, through Frank Philbrook, Los Angeles.

Mr. Philbrook, who represents the Graham Paper Co., wrote this journal, inclosing Mr. Ward's letter, and both letters are reprinted below.

Mr. John Easton Brown,
Editor Pacific Pulp & Paper Industry,
Seattle, Washington.

Dear Mr. Brown:

Bank holiday, earthquakes, etc. have disturbed my regular routine to such an extent that I owe you an apology for not answering at an earlier date your cordial letter of March 1st.

I am glad to see that you have been made editor of the Pacific Pulp & Paper Industry, but I am sorry to lose the pleasant contact that I enjoyed with you while you were here. I will try and keep you posted with the happenings in the paper trade here and will drop you a line whenever there is news of interest.

Let me again repeat what I have told you frequently when you have called to chat, how much good your magazine is doing for the industry and I hope sufficient encouragement will be given your magazine, as well as your personally, to continue the good work you are doing. We not only need a national leader, which I believe we now have in the White House, but our good old paper industry needs the superior leadership that the Pacific Pulp & Paper Industry is carrying on.

I am enclosing an original letter to me from Mr. George A. Ward, president of Ward, Davis & Dunn, that gives you first-hand glimpses of the earthquake at Long Beach. You might want to publish this letter of Mr. Ward's as I am sure it would be of interest to your subscribers in other localities to learn that Southern California was not entirely wiped out. I have been through three or four earthquakes as well as three old-fashioned cyclones and I will take the earthquake in preference to cyclones.

Let me hear from you Mr. Brown any time I can co-operate for you for the good of the paper industry.

Cordially yours,

F. R. PHILBRICK,

WARD, DAVIS & DUNN, Inc.
1180 West Ocean Avenue
Long Beach, California

Mr. Frank R. Philbrook,
So. Calif. Manager,
Graham Paper Co.,
311 So. Spring, Los Angeles, Calif.

Mar. 15, 1933

Dear Phil:

I want to thank you for the offer of your principals occasioned by our earthquake of March 10. Our entire organization escaped without bodily injury and only minor damage was done to our warehouse, with very little damage to stock.

The newspapers have greatly exaggerated the amount of damage in Long Beach. Practically all of our major office building and department stores escaped with minor damage and are already open for business.

Although there is greater damage to buildings of poor construction amounting to millions of dollars, true construction of concrete and steel were practically exempt from damage whatsoever.

We are very grateful that our own U. S. Navy was anchored off our shores and that the officers in charge immediately cooperated with our city officials in restoring order occasioned by panic-stricken and injured people. Our business is open and doing business at the same old stand, although it is not rushing, due to the circumstances.

Thanking you again for your thoughtfulness towards us, we are,

Very truly yours,

WARD, DAVIS & DUNN, Inc.
by Geo. A. Ward, President.

GAW/LB

S · A · F · E · T · Y +

+ be careful — first, last, always

• • •

HOW SHALL THE FOREMAN "BREAK IN" THE
NEW EMPLOYEE?

+ Considerable importance frequently is attached to the initial contact between employees and the department to which they are assigned. Many foremen use this opportunity to convince new employees that the foreman is the unit's leader and the employees' friend—interested not only in production but also in the safety of the workers under his supervision. They also realize that new employees should understand all specific safety rules and know how to do their jobs safely before starting to work. In addition to proper attitude of foremen, the appearance of the department and the actions and words of other employees frequently make a greater impression upon the new worker at the time of his introduction than will interviews or instructions given later.

+ Some foremen have found that friendly conversations with new workers aid in determining the degree of previous experience which new workers have had and the amount of personal supervision which they require. It generally is advisable to test the ability of new employees on non-hazardous occupations before placing them on jobs where considerable skill and experience are required.

PULP AND PAPER MILLS IN THE STATE OF WASHINGTON
Statement of Accident Experience for February, 1933

Company—	Hours Worked	Total Accidents	Frequency Rate	Days Lost	Severity Rate	Standing
Fibreboard Products, Inc., Sumner	17,208	0	0	0	0	1
Fibreboard Products, Inc., Port Angeles	16,880	0	0	0	0	2
Inland Empire Paper Co., Millwood	31,983	0	0	23	.719	3
Everett Pulp & Paper Co., Everett	64,744	1	15.4	14	.216	4
Puget Sound Pulp & Timber Co., Everett	48,540	1	20.6	15	.309	5
Crown Willamette Paper Co., Camas	181,034	4	22.1	188	1.038	6
Grays Harbor Pulp & Paper Co., Hoquiam	38,245	1	26.2	300	7.844	7
National Paper Products Co., Port Townsend	58,076	2	34.4	70	1.205	8
Weyerhaeuser Timber Co., Longview	28,515	1	35.1	14	.491	9
Washington Pulp & Paper Co., Port Angeles	26,579	1	37.6	9	.339	10
Puget Sound Pulp & Timber Co., Bellingham	26,152	1	38.2	9	.344	11
Longview Fibre Co., Longview	77,947	3	38.5	33	.424	12
Rainier Pulp & Paper Co., Shelton	46,767	3	64.1	14	.300	13
Columbia River Paper Mills, Vancouver	43,877	4	91.2	50	1.140	14

The following mills did not report: Pacific Straw Paper & Board Co., Pacific Coast Paper Mills. The following mills not in operation: Everett Pulp & Paper Co. (West Tacoma plant), Tumwater Paper Mills, St. Regis Kraft Co., Puget Sound Pulp & Timber Co., Anacortes; Shafer Box Co.

KLEEN PRODUCTS APPOINTS COAST AGENT

The Kleen Products Co., North Wales, Pa., maker of fibre spoons, forks, plates, etc., has appointed as factory representatives, Ariss, Campbell & Gault with offices in Tacoma, Seattle, and Portland. They will cover the Northwest territory.

Hal H. Williams has been appointed California agent, his organization having offices in San Francisco and Los Angeles.

PAPER FREIGHT RATES REDUCED

During the past month or two Pacific Northwest paper mills have secured a number of important rail and water freight rate reductions.

In eastbound transcontinental tariff 2-C the carload rates from all rate basis 1 points (including all Oregon and Washington mills) on fibreboard—pulp, straw or corrugated—dishes, pails, plates, trays, package fillers, partitions, boxboard, chipboard, newsboard, etc., have been reduced. The rate to all points except group J formerly was \$1, J being 95 cents. The group J rate has been cut to 78 cents, groups E-1, F, G and H to 87 cents and group E to 95 cents.

Of importance to specialty mills producing waxed paper is the inclusion of waxed wrapping paper in the carload mixture with bags and wrapping paper from coast points to Montana points in Henry's tariff No. 80. Heretofore the waxed paper moved on a class rate less than carload, which of course was much higher.

Henry's 80 also has reduced the carload rate on bags and wrapping, towels, toilet tissue, napkins and gummed paper, from Portland and intermediate points to Wenatchee from 54½ cents to 42½ cents.

Henry's 80 also has provided a 25-cent commodity rate on wrapping paper, Camas to Shelton. Heretofore there was only a combination of class and commodity totaling 32 cents.

The newsprint rate from West Linn to Southern Oregon points has been reduced from 50 cents to 45 cents. This rate expires June 30, 1933.

On napkins, toilet tissue, towels, bags, newsprint and wrapping from rate basis 1 points to Utah common points and to intermediate points, such as Boise, the rate has been cut from 70 cents to 67½ cents.

The Pacific-West Coast of South America Conference has reduced paper rates from the Pacific Coast to South American ports. There is a heavy movement on this route. To Buena Ventura, Colombia; Callao, Peru, and Guayaquil, Ecuador, the rate on wrapping paper has been cut from \$11 to \$8, on newsprint from \$10 to \$9 and on bags from \$13 to \$12.

The rail rate from Camas, West Linn and Portland to Pendleton on newsprint has been cut from 35 cents to 30 cents. Even the 35 cent rate was low in comparison with rates between points of similar distance and the 30 cent rate is therefore exceptionally low.

PAPER MACHINE MODEL FOR WORLD'S FAIR

A seven-foot paper machine model will be exhibited at the World's Fair by the Westinghouse Electric and Manufacturing Company. A small electric motor drives an endless roll of white tape at a speed of 120 inches per minute over the model's shaker table, through its two presses, 18 drying rolls and six-high calendar rolls, then to a winding reel. The model is patterned to 1/16th scale after a huge Fourdrinier paper machine which can turn out paper 204 inches wide at a rate of 1500 feet a minute or 240 tons a day.

JANUARY PAPER PRODUCTION IN JAPAN

Paper production and sales in Japan in January, 1933, were as follows:

	Productions lbs.	Sales lbs.
Printing Paper—		
Superior Quality	10,401,249	14,585,199
Ordinary Quality	10,883,244	11,306,067
Drawing Paper	3,554,018	3,976,876
Simili Paper	7,428,555	11,459,347
Art Paper	1,160,810	1,954,593
News Printing Paper	46,313,538	45,773,032
Sulphite Paper	5,191,084	4,574,467
Colored Paper	1,590,363	1,675,575
Wrapping Paper	14,051,894	16,034,347
Japanese Paper	1,606,075	1,355,376
Board Paper	6,679,755	11,991,183
Miscellaneous	4,669,008	4,564,233
Total	113,529,593	129,250,295

JAPANESE PULP IMPORTS IN JANUARY

Japan's imports of chemical pulp in the month of January, 1933, were as follows (amounts stated in pounds): From Canada, 5,458,800; U. S. A., 4,831,600; Germany, 4,081,333; Sweden, 3,718,400; Norway, 2,359,867; Europe, 90,266. Total, 20,540,266.

OREGON COMPENSATION ACT CHANGES

During Oregon's recent legislative session nearly 40 measures affecting workmen's compensation were introduced, and the pulp and paper industry was in the thick of the fight for or against various measures.

One of the most important measures enacted, and one supported by the paper men, was S. B. 161—the merit rating bill. Oregon's existing laws provided for up to 20 per cent rate reductions for favorable accident records, and no additions for poor records. The new law imposes penalties up to 30 per cent and allows for awards up to 40 per cent on the following table:

Reductions	
Less than 50% experience,	40% reduction.
Less than 55% experience,	25% reduction.
Less than 60% experience,	20% reduction.
Less than 65% experience,	15% reduction.
Less than 70% experience,	10% reduction.

Base Rate	
From 70% to 80% experience,	base.

Penalties.	
More than 85% experience,	5% increase.
Up to 90% experience,	10% increase.
Up to 95% experience,	15% increase.
Up to 100% experience,	20% increase.
More than 100% experience,	30% increase.

Other measures passed provided for:

Specifying that an occupation and all work incidental thereto, and all workmen engaged therein shall be wholly subject to or wholly outside the workmen's compensation act.

Raising the age of dependents from 16 to 18 years.

Requiring employers to make deposit or provide a bond for three months' contributions before beginning any operation. However, the commission asserts this is not to be construed to include firms that have long contributed to the fund, such as established paper mills.

Regulating the fees for legal or any other service in regard to any claim or award for compensation.

CAMAS PLANT ENLARGED

The Crown Willamette Paper Co.'s tissue plant at Camas is being altered to provide larger working space. The building is being raised and a ground floor installed which will provide 10,000 square feet additional floor area.

GERMAN PRODUCTION IN 1932

German paper and board production during the year 1932 amounted to only 1,968,014 metric tons (metric ton—2,205 pounds) as against 2,171,395 metric tons in the preceding year, a drop of 9 per cent. Exports during the same period show a drop from 466,754 tons to 324,980 tons, a loss of 30 per cent. Newsprint paper, which makes up about 25 per cent of the total production, dropped from 492,763 tons to 401,170 tons; packing paper from 207,282 tons to 192,342 tons; printings and writings with groundwood content from 333,998 tons to 319,925 tons; and wood free printings and writings from 133,566 tons to 121,534 tons. Production of boards, which totaled 247,082 tons in 1931, dropped to 329,592 tons last year.

Production of chemical pulp in Germany last year underwent little change. The output of unbleached sulphite actually increased—from 611,723 metric tons to 619,848 tons—and the production of bleached sulphite, amounting to 287,703 tons, was also slightly larger than in 1931. These gains, however, were offset by a decrease in the amount of unbleached sulphate and straw pulp produced. The total output for 1932 amounted to 966,475 tons as against 966,414 tons in 1931.

NEW LIQUID WALL PAPER

A new type of wall paper has been introduced on the German market, known as liquid wall paper. This product is used in place of the usual, relatively expensive paper or wall paint and is reported to last much longer than any of them. Lose and unbound paper-fibers are used for this purpose, being delivered in the form of a thick paste and thinned, for applying on walls, with ordinary glue paints. All kinds of colors and shades are obtainable, while various designs are also possible. This new wall cover is reported to be very elastic and durable after drying. A peeling off or separation from the wall does not occur.

NEW MANCHURIAN MILL

Machinery for a new \$220,000 paper mill to be erected in Antung, Manchuria, has now arrived and construction is scheduled to begin as soon as the weather moderates. The mill is expected to be in operation next fall. The equipment is of British and American manufacture, and of modern design, adapted to the peculiar needs of local manufacturing. The new mill, which will be known as the Liu Ho Cheng Paper Mills, has been under contemplation for some years. The original promoters were a group of Chinese business men and capitalists of Mukden and Antung. They obtained official backing and the former Manchurian government, through its official banks, took a share in the enterprise and guaranteed the contract with the machinery suppliers. The de facto government has now taken over all of the enterprises of the former government, including banks and industrial projects, and apparently intends going ahead with the paper mill.



JONES Beater in Grays Harbor Pulp & Paper Co., Hoquiam, Wash., paper mill units showing porcelain lining of tubs, Dual Texrope drives, Alum and size tanks mounted above tubs and pulp conveyor shoot for loading Beater.

Compare Its Service Record *with any beater in the world!*

Thorough tests under every condition of service, over a period of 75 years, have made JONES Beaters the undisputed leaders in their field. Before you decide upon any Beater, for any type of service, we suggest that you compare JONES Beaters with any other Beater in the world—for simplified design—for modern construction—for lasting durability—for uninterrupted service in operation—for low maintenance cost—and for ultimate economy. Convince yourself by letting us mail you further particulars. No obligation implied.

Pacific Coast Supply Co.

Seattle—Portland—San Francisco

Exclusive Pacific Coast Representative for the entire line of paper mill products made by

Jones

A name that has won a world-wide reputation, through 75 years devoted to paper-making progress

FEBRUARY NEWSPRINT PRODUCTION

Production in Canada during February, 1933, amounted to 125,610 tons and shipments to 120,916 tons, according to the News Print Service Bureau. Production in the United States was 67,085 tons and shipments 67,057 tons, making a total United States and Canadian news print production of 192,695 tons and shipments of 187,973 tons. During February, 17,474 tons of news print were made in Newfoundland and 1,132 tons in Mexico, so that the total North American production for the month amounted to 211,301 tons.

The Canadian mills produced 56,433 tons less in the first two months of 1933 than in the first two months of 1932, which was a decrease of 17 per cent. The output in the United States was 40,487 tons or 22 per cent less than for the first two months of 1932, in Newfoundland 5,241 tons or 12 per cent less, and in Mexico 261 tons more, making a total decrease of 101,900 tons or 18 per cent.

Stocks of news print at Canadian mills are figured at 54,515 tons at the end of February and at United States mills 23,363 tons, making a combined total of 77,878 tons compared with 73,156 tons on January 31, 1933. The small increase in stocks during January and February was due chiefly to accumulation of tonnage to be shipped later by water.

NORTH AMERICAN PRODUCTION

	Canada	United States	Newfoundland	Mexico	Total
1933—February	125,610	67,085	17,474	1,132	211,301
Two months	266,149	141,529	39,681	2,540	449,899
1932—Two months	329,864	181,404	44,922	2,279	558,469
1931—Two months	351,021	189,828	48,659	2,405	591,913
1930—Two months	396,332	236,449	44,361	3,216	680,358
1929—Two months	401,872	227,466	39,431	3,249	672,018
1928—Two months	376,546	231,827	34,984	2,809	646,166
1927—Two months	313,710	255,348	31,803	2,189	603,050
1926—Two months	275,351	269,691	26,545	1,916	573,503
1925—Two months	237,414	243,710	10,498	1,866	493,488

JAPAN'S 1932 PAPER PRODUCTION

Paper production in Japan during 1932 reached a total of 655,658 short tons as against 665,292 short tons in the preceding year, according to figures released by the Japanese Paper Manufacturers' Association. Sales during last year amounted to 707,384 tons compared with 664,793 tons in 1931. Production by leading classes of paper during the two years mentioned was as follows:

	1931	1932
Newsprint paper	257,797	271,786
Best grade printing	75,370	66,449
Ordinary printing	61,897	58,422
Wrapping paper	68,487	78,944
Writing and drawing	19,090	16,777
Art and ivory papers	6,766	6,166
Colored paper	8,384	8,441
Boards	38,196	38,776
Japanese-style papers and miscellaneous	129,305	109,897

Raw materials consumed by these mills during 1932 consisted of 54,810,450 cubic feet of pulpwood, as compared with 54,123,830 cubic feet in the preceding year; 8,368 short tons of rags, 10,557 tons of straw, and 24,297 tons of water paper. The companies turned out in their own mills 231,922 tons of chemical pulp and 216,308 tons of mechanical pulp, as compared with 247,711 tons and 210,125 tons respectively in 1931. Purchases of chemical pulp (chiefly representing imports) last year were somewhat heavier, amounting to 91,716 tons as against 80,216 tons in the preceding year. Purchases of mechanical pulp are almost negligible, amounting to only 3,200 tons last year and 4,376 tons in 1931.

IMPORTS OF PULP WOOD AND WOOD PULP INTO THE UNITED STATES BY COUNTRIES

FEBRUARY, 1933

Compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce
(Figures Subject to Revision.)

Countries—	PULP WOOD								Rough			
	Spruce				Peeled				Cords		Dollars	
	Cords	Dollars	Cords	Dollars	Cords	Dollars	Cords	Dollars	Cords	Dollars	Cords	Dollars
Sov. Rus. in Eur.					2,512	27,001						
Canada	1,992	11,055			6,405	46,709	3,439	19,377	17	77		
Total	1,992	11,055			8,917	73,710	3,439	19,377	17	77		

Total Imports of Pulpwood, February, 1933—14,365 cords; \$104,219.

COUNTRIES—	WOOD PULP															
	Mechanically Unbleached				Ground Bleached				Chemical Unbleached Sulphite				Chemical Bleached Sulphite			
	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars
Austria									325	9,978	78	2,829				
Czechoslovakia									424	10,994	890	33,821				
Estonia									7,808	242,083	369	17,589	3,099	75,327	79	3,463
Finland	1,175	21,395	152	2,301					50	1,493						
France									2,506	75,977	1,347	58,711				
Germany									132	2,836						
Latvia									1,641	42,493	3,542	147,545	1,300	31,185		
Norway	260	2,286	25	311					100	1,664						
Poland & Danzig									20,227	623,846	4,013	155,691	22,010	597,416		
Sweden	75	1,556	86	1,289					2,545	75,563	12,988	689,807	575	30,177	1,785	158,650
Canada	3,222	57,090														
Total	4,732	82,327	263	3,901	35,658	1,085,263	23,227	1,105,993	27,084	735,769	1,864	162,113	52	1,685		

Total Imports, All Grades of Wood Pulp, February, 1933—92,886 tons; \$3,178,200. (Includes 6 tons, \$1,149 in other pulp not listed above.)

AN UNFORTUNATE TRUTH

In a motion picture recently released, a scene shows a hard-boiled department store executive inspecting a mechanical toy produced by a local factory. It meeting his approval, he turns to his secretary and says, "All right, give him an order. But tell him to take off the 'Made in America' and mark it 'Made in Japan'. It'll sell better."

Recognizing the absurd truth in the situation, the audience laughed, few realizing the seriousness of the trend which is directly or indirectly injuring every American citizen.

SUPERINTENDENTS TO REVIEW PROGRESS

A review of the progress that has been made during the last year in the science of paper making is the object of the program being arranged for the fourteenth annual convention of the American Pulp and Paper Mill Superintendents Association. This meeting of the expert paper makers of the nation will be held June 8, 9 and 10 at Green Bay, Wisconsin. With the cooperation of National President William H. Brydges of the Bedford Pulp and Paper Company, Big Island, Va., the details of the program are being arranged by Frank J. Timmerman of the Northern Paper Mills of Green Bay, who is general chairman of the convention committee.

"It is our aim," said Mr. Timmerman, "to have a program of papers that will appeal to the makers of all kinds of pulp and paper. We want to have every superintendent and mill manager in the country come to Green Bay with the conviction that this meeting is going to produce some new information of direct value to himself and his mill."

"Among the items already arranged for the program will be papers on lubrication, mechanical improvements, raw materials, white water, maintenance, winding, new materials and new uses for paper."

Mr. Timmerman added that careful consideration is also being given to entertainment features and that the visiting paper makers will find every provision made to make their stay at Green Bay an enjoyable one.

Mr. Timmerman said that reservations coming in indicate that a good many of the superintendents plan to have their trip to the convention at Green Bay include a stop over for the Century of Progress Exposition in Chicago.

Genuine Glassine and Greaseproof Industry for Pacific Coast

NOTICE TO MILL OFFICIALS:

Have you a mill idle, running part time or are you dissatisfied with your present product?

You have the opportunity of obtaining the services of a superintendent with many years' experience with the leading manufacturers of all grades of glassine, embossed glassine, grease-proof and sulphite manifolds.

Specializing in super-transparent and grease-resisting papers. Guarantee maximum production, minimum production costs and operating efficiency.

Can take complete charge of the conversion of your plant and the manufacturing of the above high grade papers. Best of references.

Address reply Box 21, care, Pacific Pulp & Paper Industry, 71 Columbia Street, Seattle, Washington.

Name It -and We Have It

There are all kinds of paper mills and all kinds of paper machines in them. There are all sorts of operating conditions and all sorts of felting needs.

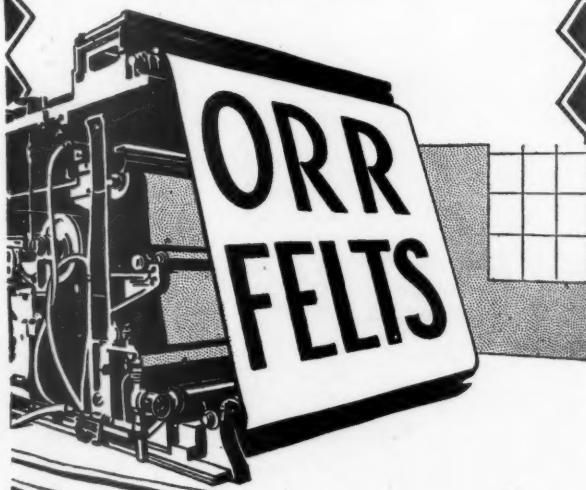
We weave fine belts with which to serve those many and varied felting requirements, and can send you a felt adapted to any condition you may describe.

Nor are we ever hesitant about placing Orrs in competition with other felts to determine which leads in water removal qualities, or in ability to stand hard wear.

Send your next felt order to Piqua.

Pacific Coast Representative: GEO. S. MEDDIS
1650 No. Point St., San Francisco, Calif.

The
Orr Felt & Blanket Co.
PIQUA, OHIO



HAWLEY COMPLETES PULPWOOD FLUME

Hawley Pulp & Paper Company, Oregon City, completed in March the construction of a flume to carry wood to their ground mill, which is located out in the stream. In the past, wood for the ground mill unloaded from the freight cars has had to be loaded aboard a barge to be hauled across the basin, a distance of about 500 feet, and then unloaded.

The flume has been built around the basin and the wood is now unloaded from the freight cars directly into it and carried direct to the ground mill. The flume is expected to afford a fairly substantial saving.

B. C. COMPANY REPORTS 1932 LOSS

A loss of \$76,206, before interest on bonded debt and reserve for income taxes and without reserve for the depreciation, is reported for 1932 by British Columbia Pulp & Paper Company. The loss is due to the shutdown of the company's two plants, at Port Alice and Woodfibre, owing to depressed markets. Both plants were reopened last December, however, and are still running, so that the position of the company has probably improved somewhat since the report was filed.

The statement for 1931 showed profits of \$341,446 before interest or bonded indebtedness and reserves for depreciation and income taxes. No dividends were paid during 1932.

Co-operation between bondholders and employees was attained during the past year, and this was of great assistance to the company, according to President Lawrence W. Killam. With inventories valued conserva-

tively current assets as at December 31, 1932, were \$712,465 in excess of current liabilities.

Interest on the company's 6 percent first mortgage sinking fund gold bonds has been paid. Payment due to the trustees November 31, 1932, for sinking fund purposes has been waived by agreement of 51 percent of the bondholders.

In connection with the 7 percent general mortgage sinking fund gold bonds, the trust deed has been amended to authorize postponement of interest payable in the year 1932 and 1933 until November 1, 1934. Interest to accrue at 7 percent on payments so deferred.

The balance sheet shows current assets at \$958,398 compared with \$1,234,785 at the end of 1931. Current liabilities are \$245,933 compared with \$232,752.

Bonded debt amounts to \$4,776,400, the same as the previous year, while interest owing on the 7 percent bonds without providing for United States exchange is carried as a deferred liability at \$120,992.

AUSTRIAN PRODUCTION IN 1932

Austrian pulp and paper production during 1932 was consistently under that of the preceding year, according to figures compiled by the Austrian Paper and Pulp Association. Production during the two years mentioned was as follows:

	1931 Metric Tons	1932 Metric Tons
Paper	210,060	200,950
Boards	29,680	22,690
Chemical pulp	215,580	199,640
Mechanical pulp	96,080	83,410

SERVICE

Do you plan to change

Your grade of paper
Your type of press rolls
Your machine drive



Do you contemplate the addition of new equipment or any change that will affect the size or strain on your felts?

Any one of these may require a change of felt design. It is essential that the felt manufacturer know of these changes in advance if best results are to be obtained.

The Kenwood organization with its years of research and practical experience is qualified to determine the proper type of felt to meet the exact conditions under which it is to be used.

This service is at your disposal — either through our representatives or laboratory—a combination that will always work to your advantage.



KENWOOD *tanned* FELTS

F. C. HUYCK & SONS

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KENWOOD MILLS LTD., ARNPRIOR, ONTARIO, CANADA

Manufacturers of Paper Makers' Felts Since 1870

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